CAMPUS ALBERTA PLANNING RESOURCE

<< 2012 >>

Profiling Alberta's Advanced Education System

Alberta Enterprise and Advanced Education

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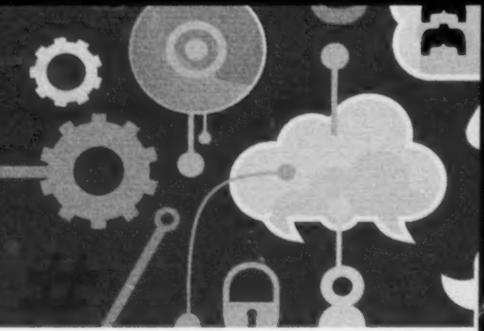
Executive Summary



Overview >>>

Alberta's future growth and prosperity depend on the education, skills, and entrepreneurial spirit of its people. Albertans need quality and accessible training and educational opportunities to fully engage in the labour market and in lifelong learning. These training and educational opportunities are provided by Campus Alberta, an integrated and collaborative advanced education system of publicly funded post-secondary institutions comprised of six sectors. Through the collective contributions of each sector, and the collaboration of institutions from all sectors, Alberta's publicly funded post-secondary learning system can provide the educational and training opportunities Albertans need. In addition, Campus Alberta is supported in its work by Alberta Innovates, community adult learning providers, private educational institutions, and industry.

Three priority policy directions have emerged for CAPR 2012 to help government and the adult learning system meet the needs of Albertans. These are:

- **Support Alberta's economic and social progress so we can reach our full potential**
- **Focus on outcomes**
- **Enhance system collaboration and partnerships**

A province like Alberta, with its vast geography, relatively small population, high demand for skilled labour, and robust economy transitioning from a resource base to a knowledge base, presents both unique challenges and opportunities for planners and policy makers.

Is Alberta's adult learning system producing what the provincial economy and Alberta society need?

How do adult learning providers and the government remain innovative in the face of technological change, financial constraints, and changing skills requirements in the labour market?

What do fluctuations in the price of natural resources and the exchange rate mean for provincial revenues?

How many international students come to Alberta and stay?

How do these factors impact the accessibility of adult learning and the number of graduates we produce?

Ultimately, how can Alberta's advanced education system and government respond to current realities as well as meet the future needs of learners, taxpayers, the economy, and society?

To answer these and other questions, we must better understand the demographic and socio-economic forces that impact the province and Campus Alberta. Awareness of these forces helps ensure that the needs of learners, society, and the economy are met—all while maintaining the quality and sustainability of the adult learning system.

Campus Alberta Planning Resource (CAPR) enhances this understanding. CAPR is a key mechanism in fulfilling Enterprise and Advanced Education's mandate: to lead the development of a knowledge-driven future through a dynamic and integrated advanced learning and innovation system, and provide strategic leadership to Campus Alberta and Alberta Innovates.

CAPR was designed to provide context for Alberta's adult learning system, to support planning and priority setting. It helps put parameters around enrolment and program-related choices and gives the system a common foundation of data and information to support evidence-based decision making. Information in the document supports institutional planning and system alignment, and identifies broader strategic directions and policy outcomes.

Executive Summary

Each publicly funded post-secondary institution is asked to respond to the priority directions by developing a Comprehensive Institutional Plan. As part of their submission, institutions are also asked to provide an environmental scan, focusing on the key enrolment, economic, and societal drivers that impact their organization. CAPR supports the information gathered by institutions by providing system, regional, and institution-level information tailored to our Alberta context. Providing the system with a Ministry perspective on key opportunities and challenges develops a foundation for ongoing dialogue between institutions and the Ministry.

CAPR 2012 provides comprehensive data, information, and analysis in six key areas:

1. People – Alberta's demographic profile
2. Economy – the relationship between economic factors, such as employment, government revenues, and investments, and their impact on the demand for, and capacity of, the advanced education system
3. Post-secondary education – enrolment trends and post-secondary participation
4. Student flows – learner mobility and transitions into, through, and out of post-secondary education
5. Demand and capacity – the capacity of the adult learning system to accommodate learner and labour market demand
6. Research – research activities, funding, and revenues

What's New in CAPR 2012?

The following features are new to CAPR 2012:

- Information reflecting the ministry's broader mandate, which now also includes enterprise, economic development, immigration and labour force development
- Key discussion questions at the beginning of each chapter
- Expanded information and discussion on youth unemployment in Alberta (Chapter Two)
- Information on enrolment by gender at a sector and program-band level for the publicly funded post-secondary institutions in Alberta (Chapter Three)
- Information on the number of journeyman certificate completions (Chapter Three)

Government of Alberta Policy Priorities

Alberta's adult learning providers play a valuable role in Alberta's society and economy—they are economic drivers for their communities, they produce the educated and skilled graduates we need for the labour market, and they contribute to the social and cultural fabric of our society. While each provider is unique and autonomous, and has its own strengths and challenges, each contributes to the overall adult learning system of Campus Alberta—which is vital for achieving the policy objectives of the Government of Alberta (GOA).

1. **Investing in families and communities**
2. **Securing Alberta's economic future**
3. **Advancing world-leading resource stewardship**

In the last year, the GOA's policy agenda has changed considerably. Its strategic plan for 2012–15 includes the new vision of "reaching our full potential," which will be achieved through three priority target areas:

To achieve these priority target areas, the premier has determined six priority initiatives, which all government ministers are mandated to achieve as a collaborative team:

1. Early childhood development
2. Primary health care
3. Education and entrepreneurship
4. Rebalanced fiscal framework
5. Integrated resource system
6. Expanded market access

There are specific commitments under each of these initiatives. While Campus Alberta can positively contribute to all of the commitments, the two with the greatest connection to adult learning are a commitment to closing the participation gap of under-represented groups in post-secondary and a commitment to reviewing all programs and services as part of results-based budgeting.

This new policy agenda is also reflected in the organization of government ministries, including the ministry that works primarily with adult learning providers, which is now Enterprise and Advanced Education. The new ministry

Priority Directions >>>

name and organization reflect the shift to considering adult learning issues and priorities in alignment with issues and priorities related to the labour market, business, and the economy.

This is an exciting time in the province and one likely to signal a fair bit of change, and Campus Alberta is well positioned to contribute significantly. By continuing to build strong partnerships across the system and with government, being innovative, remaining focused on learners and continuous improvement, and aligning to strategic directions, adult learning providers will continue to play a valuable role in building Alberta for the years ahead.

Priority Directions for Campus Alberta

Adult learning providers promote the GOA's vision and priorities primarily by delivering on their respective academic, research, and community development mandates. In order to assist adult learning providers in their planning to deliver on these mandates, additional priority directions are identified specifically for Campus Alberta.

Adult learning providers are asked to respond to the following three interrelated priority direction areas and their corresponding eight areas of focus outlined below in their planning for 2013–14 and beyond.

1. **Support Alberta's economic and social progress so we can reach our full potential**
2. **Focus on outcomes**
3. **Enhance system collaboration and partnerships**

Support Alberta's Economic and Social Progress so We Can Reach Our Full Potential

Alberta is a modern, diverse society with a wide variety of social and economic needs and strengths. A high quality of life in Alberta depends on people contributing to the best of their ability. Adult learning providers will be instrumental in helping Alberta succeed in reaching its full potential, as these organizations have a unique role in driving social and economic progress in the province. They help people contribute to building Alberta by providing diverse programs and pathways, allowing people to engage and succeed wherever their interests and talents take them.

Adult learning providers also develop and deliver on the programming that will fulfill the skill needs of the labour market that fuels Alberta's economy. The programming that the economy needs and the programming that learners demand are not always synonymous. Meeting both needs can be challenging but one the Campus Alberta system is well-positioned to respond to as a whole. Having learning providers with diverse mandates, diverse programming and the spirit to collaborate provides the foundation for a system that can become even more responsive, more nimble in how it responds to current challenges and gets ahead of future ones.

Focus on Outcomes

As is the case in other jurisdictions, Albertans expect public resources to be used effectively and efficiently to generate tangible results that improve our society and economy. The GOA has introduced results-based budgeting, which focuses on meaningful outcomes, appropriate expenditures, and results that align with the GOA's overall economic and social objectives.

Accordingly, over the coming year, the GOA will be consulting with post-secondary institutions that receive public funding to develop the system-level, sector-level, and institution-level outcomes that define what we are striving to achieve and against which performance will be measured. These measures will identify the social and economic returns on GOA investment in post-secondary institutions, and value for taxpayer money. Government and institutions will be required to provide additional and more meaningful evidence of the merits of our activities as well as strengthen measures to demonstrate accountability.

Among the most important of the outcomes will be program outcomes and the results they produce for learners and the Campus Alberta system. While outcomes still need to be articulated, it is expected that institutions will be required to demonstrate the return on the GOA's investment in terms of meeting the needs of learners, society and the economy, as well as quality, affordability, accessibility, and collaboration, among others. The renewed focus on outcomes will also extend to both pure and applied research conducted in post-secondary institutions.

A key challenge for the GOA and institutions will be in identifying and articulating the socio-economic benefits of adult learning and demonstrating the social, economic, and environmental outcomes and return on investment for government-funded research. This is also a key opportunity to research and clearly articulate to the public and learners the substantial benefits of their investment. It is an exciting time and one to which institutions could be instrumental in contributing.

Priority Directions >>>

Enhance System Collaboration and Partnerships

Cooperation and collaboration within Campus Alberta is the backbone of the success of Alberta's advanced education system and is one of the strongest tools our advanced education system has in being able to reach our full potential and achieve the various objectives highlighted above. Collaboration takes many forms and includes the ability of the system to work together to provide seamless learning opportunities for learners, effectively allocate resources, improve efficiency, and allow Campus Alberta partners to do more together than they can accomplish individually. This includes working together to increase efficiency and effectiveness in program offerings and services provided across the system. While collaboration is already happening, Alberta needs to build a stronger culture and practice of collaboration and requires greater emphasis on collaboration among post-secondary institutions in various sectors, with other adult learning providers, with government, and especially with communities and industry.

Areas of Strategic Focus

1. **Support Alberta's economic and social progress so we can reach our full potential**

i Respond to labour market and learner demand for programming

ii Increase the culture of entrepreneurship, competitiveness and productivity within adult learning providers and among graduates to increase the economic and social contributions of adult learning providers

iii Respond to the mandate item of closing the participation gap of under-represented groups in post-secondary

2. Focus on outcomes

iv In response to results-based budgeting and in collaboration with affected stakeholders, develop institutional, sector, system, and/or societal outcomes to demonstrate what we are striving for and what we want to achieve with adult learning and research investment

v In collaboration with affected stakeholders, develop institutional, sector, system and/or societal key performance indicators to measure success in achieving those outcomes

vi Enhance alignment of Campus Alberta research priorities and capacity with the key outcomes and themes articulated in the *Alberta Research and Innovation Plan*

3. Enhance system collaboration and partnerships

vii Build upon current strengths to further the cultural shift to collaboration among adult learning providers in order to better serve learners, achieve efficiencies, leverage expertise, and maximize resources

viii Increase research and innovation system engagement and collaboration among Campus Alberta faculty and students, the GOA, and industry to advance the knowledge-driven economy and create societal benefits

Opportunities and Challenges >>>

CAPR 2012 includes a great deal of information that affects the GOA and adult learning providers. We all face challenges, as well as opportunities, in dealing with these factors, which will impact our work, our collaboration together, and our ultimate ability to achieve the outcomes for which we strive.

Demographic Change

Like all provinces, Alberta faces significant demographic changes, not least of which is an aging population. While Alberta's population is younger than that of other provinces in Canada, the proportion of younger Albertans is nonetheless in decline. This shift will result in fewer young people to participate in the adult learning system, leading to increased competition for learners among adult learning providers within Alberta, and between Alberta providers and those outside the province. The competition includes the emerging online presence of large, reputable Canadian and international providers. The aging population will also lead to increased demand for continuing education and educational pathways for mature learners. In addition, it will affect instruction at adult learning providers, as providers respond to the effects of baby-boom retirements among faculty and instructors.

Population growth among some under-represented groups (such as Aboriginals) continues to outpace that of other segments of the population. In addition, population growth in Alberta is disproportionately tilted toward urban areas, with most growth occurring in large cities, especially in the Edmonton-Calgary corridor. These trends have implications for the adult learning system. With higher populations of under-represented groups, learner populations are increasingly diverse. Adult learning providers that can provide flexible, accessible learner pathways, expand on best practices, and engage in new thinking to accommodate these under-represented groups will succeed in reaching them. All of these demographic changes will necessitate innovation in education delivery models.

Labour Market Conditions and Fiscal Environment

Despite a number of indicators pointing to economic growth in Alberta, our recovery from the 2008 global financial crisis continues to be fragile. Ongoing global financial uncertainty is contributing to uncertainty in the Canadian and Albertan economies, and Alberta's heavy reliance on commodities and vulnerability to the high Canadian dollar make our future economic growth prospects unclear. As a result, the GOA's financial resources are highly variable, making its long-term contributions to public services difficult to determine.

Despite the increasing uncertainty in the economy and government revenues, Alberta continues to have significant skill shortages in our labour market, which are expected to persist at least for the next decade. Between 2011 and 2021, Alberta could experience a labour shortage of approximately 114,000 people, more than half of whom will require post-secondary education. These skill shortages will be most acute in the trades and technology, health sciences, and business program bands. With these skill shortages, and the demographic changes leading to a smaller working-age population, Alberta will need improved labour force and economic productivity to continue to grow.

These circumstances have a variety of impacts on the adult learning system, which operates in the same uncertain economic climate, and which will face greater scrutiny of its contributions to the economic recovery and labour market. As adult learning enrolment tends to be counter-cyclical relative to the economy, adult learning providers may face increasing enrolments despite more limited government financial contributions. These organizations, and the GOA, must continue to respond to labour market needs, ideally at a faster rate, to help address the skill shortages in the Alberta economy. Doing so will put pressures on learning providers to fully understand employer needs, align programming to meet the needs and increasingly ensure learners graduate with the necessary skills and experience to effectively move into the labour market.

As Alberta continues to emphasize the importance of increasing our competitiveness and productivity, it is expected that employers and industry will also have a greater responsibility in contributing to the training and skills development of the workforce.

While an emphasis on labour market needs is important, adult education is much more than producing employees for industry - it is also about producing critical thinkers, artists, entrepreneurs and global citizens. Adult learning providers play a key role in contributing to the social and cultural fabric of Alberta's society. As fiscal environments continue to tighten, adult learning providers will face increasing pressure on how to strike the balance between meeting these economic and social needs.

Post-secondary Education – Demand and Enrolment

Alberta continues to experience significant demand for post-secondary education, as over 154,000 applicants submitted over 232,000 applications to Alberta's publicly funded post-secondary institutions in the fall of 2011. Ninety-one percent of the qualified applicants among this group were offered admission. However, 70% of these applicants applied to only a single program at a single institution in Alberta. These figures suggest that while demand and enrolment remain solid, there may be hindrances to multiple applications for many learners. These could include an unwillingness to relocate, application fees, and a lack of awareness of other options and learner pathways across Campus Alberta. Some of these people may also apply at out-of-province institutions.

Enrolment in post-secondary education continues to increase, though it grew at a more moderate pace in 2011, likely due, in part, to strong labour market growth. In particular, enrolment among self-identified Aboriginal people, and enrolment in private vocational organizations and community adult learning programs, continue to experience growth. However, participation rates among those aged 18–34 are the lowest in the country, as they have been for several years.

These trends indicate that while demand for post-secondary education remains high, it is not uniformly high across demographics and educational experiences. The challenge for post-secondary institutions will be in addressing these regional and demographic issues, while confronting lower enrolment rates among those aged 18–34. Collaborative partnerships between institutions in various regions (and between institutions and community adult literacy and learning providers), flexible learner pathways, and strong communication of the opportunities available may help address these challenges.

In addition to high demand and enrolment, transferability of students among post-secondary institutions remains high. In fall 2010, over 12,000 students transferred among Alberta post-secondary institutions, while nearly 7,000 additional students transferred into Alberta institutions from outside the system. These transfers are multi-directional, are not geographically isolated, and occur between and within all six sectors of the system. This indicates that there is increased mobility among students within the system. While this suggests a degree of success in collaboration among institutions and the existence of flexible learner pathways, post-secondary institutions may have to prepare for increased student transfer, and ensure that their courses offer appropriate transfer credit.

Research Capacity

Research and innovation continue to be an important tool in achieving the GOA's social, environmental, and economic objectives. After several years of significant increases in provincial and federal research funding, research funding levels are flattening. In the context of limited budgets in all public institutions, this trend presents a challenge to Alberta's research and innovation system. System coordination and alignment to the objectives described in the *Alberta Research and Innovation Plan* can help to create critical mass of expertise in key areas of research and complementary strategic capacity. The alignment of collaborative effort, expertise, and capacity creates the environment for transformative research results that support key outcomes for the research and innovation system. Such alignment may be achieved without sacrificing broader institutional priorities, emerging areas of opportunity and regional priorities.

Limitations in funding may be mitigated by exploring opportunities for system collaboration, such as strategically sharing research facilities and services within and among Campus Alberta institutions in order to create efficiencies and potentially spur greater research collaborations.

A key mechanism for knowledge transfer into the economy is training talented students who bring their expertise and ability to industry and the public/non-profit sectors. As a result, continuous improvement in embedding research into the student experience will strengthen the quality of Alberta graduates and spur innovation in the private sector. Ongoing engagement with industry and small to medium-sized enterprises will further expedite knowledge transfer and market opportunities.

Trends in competitive funding, or sponsored research revenue, which is research funding garnered outside of institutional operating grants, demonstrate that Alberta is a strong centre of research activity, and that post-secondary institutions are key components of Alberta's research and innovation system. Because this system contributes to the strategic directions of the province, the GOA has made supporting it a priority, as is evidenced by the investment of $380 million in research and development in 2010–11. However, it is important for post-secondary institutions to demonstrate the social and economic benefits of publicly funded research and how it is improving the quality of life of Albertans.

Government and post-secondary institutions must continue building research capacity in the province to see improved outcomes related to the themes and opportunities conveyed in the *Alberta Research and Innovation Plan*. Doing so will ensure Alberta continues to be a national leader in research excellence, while working toward its social, environmental, and economic goals.

Geographic Service Regions

Service regions are defined areas of the province that provide a framework for better understanding local factors relating to learning and programming at a regional level.

In consultation with stakeholders, regional boundaries were drawn based on dissemination area (DA) boundaries and the area generally served by Comprehensive Community Institutions (CCIs).

Where available, data is provided at the regional level to reflect the different contexts and unique regional circumstances that affect learners and learning providers. For example, factors such as in-migration, unemployment rates, demographics, and urban/rural mix all vary from one region to the next and affect institutional programming and the student services offered.

Regional boundaries for CCIs are meant to approximate general service regions and act as guidelines for planning purposes. CCIs align with service regions in order to enhance strategic planning, achieve access goals, and strengthen partnerships and collaboration. Regional boundaries provide a guide for CCIs in their stewardship role as they engage communities within their region and develop Comprehensive Institutional Plans. Because it focuses on distance delivery, Athabasca University is not allocated to any particular service region.

As a result of boundary changes, regional data presented in this edition of CAPR may not reconcile with that presented in previous iterations.

Geographic Service Regions >>>

Alberta's Publicly Funded Post-Secondary Institutions

Comprehensive Academic & Research Institutions

UA	**University of Alberta**
UC	**University of Calgary**
UL	**University of Lethbridge**
AU	**Athabasca University**

Baccalaureate & Applied Studies Institutions

GMU	**Grant MacEwan University**
MRU	**Mount Royal University**

Polytechnical Institutes

NAIT	**Northern Alberta Institute of Technology**
SAIT	**Southern Alberta Institute of Technology**

Comprehensive Community Institutions

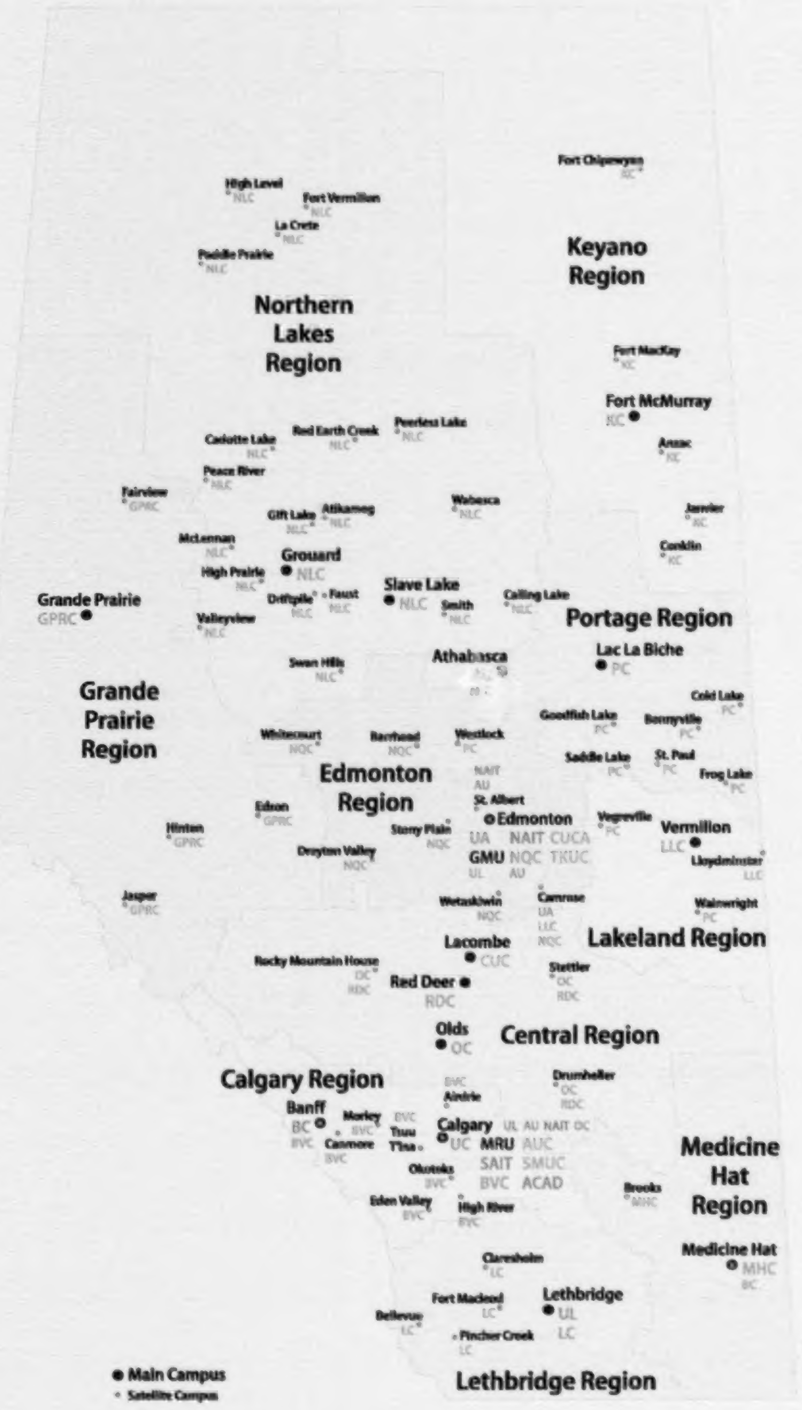
BVC	**Bow Valley College**
GPRC	**Grande Prairie Regional College**
KC	**Keyano College**
LLC	**Lakeland College**
LC	**Lethbridge College**
MHC	**Medicine Hat College**
NQC	**NorQuest College**
NLC	**Northern Lakes College**
OC	**Olds College**
PC	**Portage College**
RDC	**Red Deer College**

Specialized Arts & Culture Institutions

ACAD	**Alberta College of Art + Design**
BC	**The Banff Centre**

Independent Academic Institutions

AUC	**Ambrose University College**
CUC	**Canadian University College**
CUCA	**Concordia University College of Alberta**
SMUC	**St. Mary's University College**
TKUC	**The King's University College**


Fort Chipewyan KC
High Level NLC
Fort Vermilion NLC
La Crete NLC
Paddle Prairie NLC
Keyano Region
Northern Lakes Region
Fort MacKay KC
Fort McMurray KC
Cadotte Lake NLC
Red Earth Creek NLC
Peerless Lake NLC
Anzac KC
Peace River NLC
Fairview GPRC
Wabasca NLC
Gift Lake NLC
Atikameg NLC
Janvier KC
McLennan NLC
Grouard NLC
Conklin KC
High Prairie NLC
Grande Prairie GPRC
Driftpile NLC
Faust NLC
Slave Lake NLC
Smith NLC
Calling Lake NLC
Portage Region
Valleyview NLC
Lac La Biche PC
Swan Hills NLC
Athabasca
Grande Prairie Region
Cold Lake PC
Goodfish Lake PC
Bonnyville PC
Whitecourt NQC
Barrhead NQC
Westlock PC
Saddle Lake PC
St. Paul PC
Frog Lake PC
Edmonton Region
NAIT AU
St. Albert
Edson GPRC
Hinton GPRC
Edmonton
UA NAIT CUCA GMU NQC TKUC UL AU
Stony Plain NQC
Vegreville PC
Vermilion LLC
Drayton Valley NQC
Lloydminster LLC
Jasper GPRC
Wetaskiwin NQC
Camrose UA LLC NQC
Wainwright PC
Lakeland Region
Lacombe CUC
Rocky Mountain House OC RDC
Red Deer RDC
Stettler OC RDC
Olds OC
Central Region
Calgary Region
BVC Airdrie
Drumheller OC RDC
Banff BC BVC
Morley BVC
Canmore BVC
BVC Tsuu T'ina
Calgary UL AU NAIT OC UC MRU AUC SAIT SMUC BVC ACAD
Medicine Hat Region
Okotoks BVC
Eden Valley BVC
High River BVC
Brooks MHC
Medicine Hat MHC BC
Claresholm LC
Fort Macleod LC
Lethbridge UL LC
Bellevue LC
Pincher Creek LC
Lethbridge Region
● Main Campus
• Satellite Campus

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Chapter One

PEOPLE

Overview >>>

Alberta's demographic landscape is the foundation for its post-secondary participation and a key driver in planning the breadth and volume of post-secondary opportunities across the province. The province's demographic profile affects which access strategies will be most effective for Albertans, as needs and barriers vary among groups. Along with provincial trends, demographic shifts at the regional and subpopulation group levels must be considered.

CHAPTER HIGHLIGHTS:

- Alberta's population is increasing, but rates of increase are uneven across regions and subpopulations. Growth rates are higher in major urban centres and among Aboriginal populations.
- Alberta's population is aging. Growth in the number of people outside the labour market (e.g., seniors) requiring social services is outpacing growth in the working-age population.
- Alberta does not have the population to meet its labour market demand.
- Fortunately, Alberta continues to be a top destination for immigrants to Canada and interprovincial migrants.
- Strategies to attract and retain people are vital to economic and social prosperity.
- Alberta's educational attainment levels are on par with the Canadian average—largely because people who come to Alberta to work already have the skills and education they need.
- The educational attainment of Aboriginal Albertans has increased significantly over the past decade but continues to be lower than that of the non-Aboriginal population.

KEY QUESTIONS:

- How can Alberta support its aging population, which will require more social services? What post-secondary education resources will be needed to train people to deliver these services?
- How can Alberta leverage contributions from under-represented groups, including Aboriginals and people with disabilities?
- How can Alberta support growth in its urban centres while still maintaining services and opportunities for those in rural communities?

Chapter One: People

Population >>>

Population

Alberta has historically had one of the strongest population growth rates among the provinces. The strong economy draws people from Canada and beyond to our healthy job market and high quality of life. In 2011, Alberta's population grew by 2.03%, more than the previous year's 1.36%.[1]

Projected Population Growth

Between 2011 and 2021, Alberta's overall population is projected to increase by 19.5%, from 3,779,353 to 4,516,570. Overall population growth is anticipated for all service regions, ranging from a high of 44.1% (from 72,284 to 104,150) in the Keyano region to a low of 6.4% (from 69,226 to 73,666) in the Lakeland region. This differs slightly from projections in previous CAPRs, though the overall trends are maintained.

The projected growth is lower for 18- to 34-year-olds. Over 2011–21, an overall population increase of 6.3% (from 996,415 to 1,058,995) is anticipated for this prime post-secondary-attending cohort. The Northern Lakes region has the highest projected 18–34 population increase at 14.9% (from 20,744 to 23,845) while the Portage region has the lowest at 0.8% (from 19,474 to 19,627). This differs from projections in previous CAPRs, which predicted decreases in some service regions.

Forecasted Population Growth By Service Region, All Ages

Geographic service region	2011 population	2021 population	% change
Calgary	1,378,106	1,687,552	22.5%
Central	307,795	359,644	16.8%
Edmonton	1,343,421	1,607,615	19.7%
Grande Prairie	141,048	159,905	13.4%
Keyano	72,284	104,150	44.1%
Lakeland	69,226	73,666	6.4%
Lethbridge	186,721	209,518	12.2%
Medicine Hat	112,410	128,118	14.0%
Northern Lakes	86,249	96,280	11.6%
Portage	82,093	90,172	9.8%
Alberta	3,779,353	4,516,570	19.5%

Note: Figures may not total due to rounding. Source: Alberta Treasury Board and Finance, 2012.

An Aging Population

Although Alberta has a younger demographic structure than other provinces, its overall population is still aging. The median age of Alberta's population is anticipated to climb from 36 in 2011 to 40 in 2041.[2]

Components of Population Growth, Alberta, 2011

Total population (Jan. 1, 2011)	3,742,193
Net interprovincial migration	19,141
Net international migration*	25,898
Net non-permanent residents	3,075
Net population growth	75,787
Total population (Jan. 1, 2012)	3,817,980

* Includes non-permanent residents

Source: Alberta Treasury Board and Finance. *Quarterly Population Report: Fourth Quarter - 2011.*

Forecasted Population Growth by Service Region, 18-34 Years

Geographic service region	2011 population	2021 population	% change
Calgary	367,944	390,868	6.2%
Central	76,807	81,406	6.0%
Edmonton	362,641	381,658	5.2%
Grande Prairie	36,919	41,647	12.8%
Keyano	25,335	28,560	12.7%
Lakeland	14,768	15,858	7.4%
Lethbridge	44,994	47,116	4.7%
Medicine Hat	26,788	28,385	6.0%
Northern Lakes	20,744	23,845	14.9%
Portage	19,474	19,627	0.8%
Alberta	996,415	1,058,995	6.3%

Note: Figures may not total due to rounding. Source: Alberta Treasury Board and Finance, 2012.

Over the same period, the proportion of seniors is expected to rise, as the number of people aged 65 and above more than doubles to 18.8% of the population in 2041 from only 10.8% in 2011. By 2041, about 1 in 17 Albertans will be 80 years and over, compared to 1 in 34 in 2011.[3]

As the number of seniors continues to increase at a greater rate than the working- age population, the dependency ratio is expected to increase. The dependency ratio is a comparison between people not of working age (i.e., children aged 0–14 and seniors aged 65+) and working people (aged 15–64), expressed as the number of children

Population >>>

and seniors per 100 working-age people. Due to the number of seniors rising at a greater rate than the working-age population, the total dependency ratio is expected to rise from 41 in 2011 to 55 by 2041.[4] The rise in Alberta's dependency ratio is problematic, as people not of working age are likely to be socially or economically dependent on the working-age population, placing additional demands on social programs.

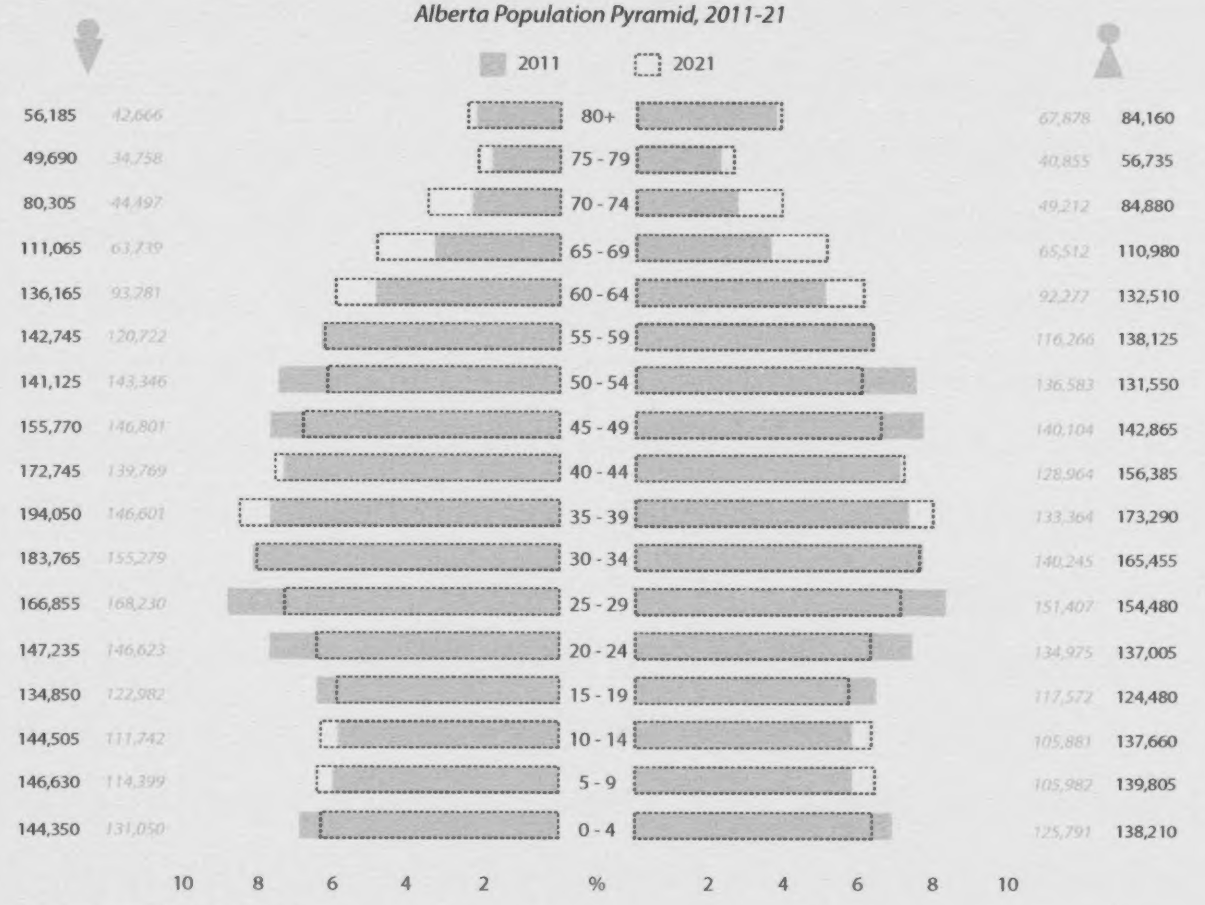
Immigration and interprovincial in-migration are key factors in alleviating the decline in Alberta's working-age population.

The aging population, and a higher percentage of retirement-age Albertans, will mean fewer Albertans able to participate in the workforce. This, combined with an increasing need for well-trained, educated workers, will mean that post-secondary education will be even more important for Alberta's economic and social success in the future.

Combined with those at the regional level, provincial demographic trends are useful for understanding post-secondary access pressures across the province. Within Alberta, a number of significant demographic forces exist in particular populations. While not homogeneous, these groups often share traits and needs that impact the timing, location, and nature of their post-secondary demand.

A better understanding of the demographic profile of these groups is necessary for creating the right kind of system capacity.

Alberta Population Pyramid, 2011-21



Source: Alberta Treasury Board and Finance, 2012.

Diversity >>>

As Alberta's population ages and its labour force shrinks, it is important to engage the diversity of Alberta's population to help reduce labour market shortages. This engagement should begin in the adult learning system, if not earlier. Improving the diversity of post-secondary representation will have many social benefits in Alberta.

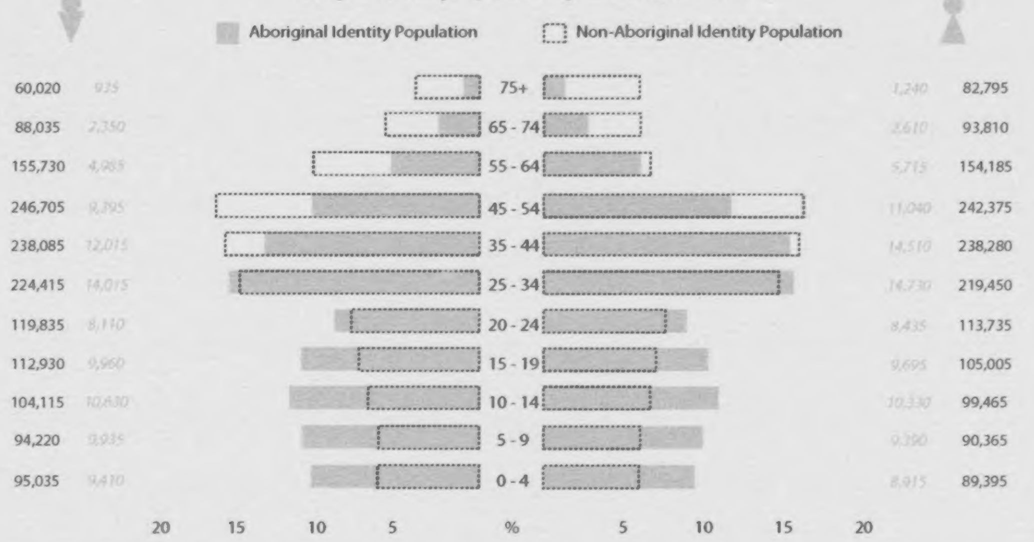
Most notably, these benefits may include enhancing the quality of life and long-term financial security for vulnerable groups, including Aboriginals, persons with disabilities, single parents, and immigrants. From a government and taxpayer perspective, improving access to post-secondary education for these groups may also lead to less reliance upon social assistance and government supports. In addition, supporting diversity is important because it can enrich the perspectives in a classroom, facilitating a better learning experience. Finally, by supporting greater diversity in post-secondary education, government and adult learning providers can help Albertans gain equal access to the opportunities in our province, pursue their goals, and reach their full potential.

Aboriginal Peoples

As of 2006, more than one million Aboriginal people lived in Canada, accounting for 3.8% of Canada's population. Alberta is home to a significant proportion of Canada's Aboriginal peoples. In fact, 16% of Canada's Aboriginal population lived in Alberta in 2006—the third-highest proportion among provinces, after Ontario (21%) and British Columbia (17%). Of Alberta's total population in 2006, about 6% was Aboriginal (the third-highest provincial percentage, behind Manitoba at 16% and Saskatchewan at 15%).[5]

Aboriginal peoples represent one of the few growing segments of our population. Between 1996 and 2006, Canada's Aboriginal population grew by 45%, nearly six times faster than the 8% rate of increase for the non-Aboriginal population. This growth rate is due to several factors, including higher fertility rates, a younger age structure, and the increasing tendency to self-identify. Some reserves are not included, or only partially included, in census counts for a variety of reasons; there has been an increase in the number of enumerated reserves since 1996. This increase in the number of enumerated reserves is another factor that contributed to the high growth rate observed in the census numbers.[6]

Aboriginal Identity Population Pyramid, Alberta 2006



Source: Statistics Canada. Census of Population, 2006.

Diversity >>>

As the fastest-growing Aboriginal group in Canada, Métis are outpacing the growth of all other Aboriginal and non-Aboriginal populations. Between 2001 and 2006, the number of Métis in Canada increased by 91% to reach 389,785 people. Similarly, Métis in Alberta increased by 73% to 85,500.[7] Alberta has historically been the main province of residence for Canada's Métis population, with 22.4% (68,500) living in Alberta in 2001.

As is the case across Canada, Alberta's Aboriginal population is increasingly urban. In 2006, 54% lived in urban centres, a 4% increase since 1996.[8] The Edmonton census metropolitan area had the second-largest proportion of its population identifying as Aboriginal (5%), followed by Calgary (2%).[9]

While the Aboriginal population is growing and becoming more urbanized, its median age is also dropping. In 2006, the median age of Aboriginal people residing in Canada was 27, compared to 40 for non-Aboriginal people. Almost half (48%) of the Aboriginal population was 24 or under, and one third was 15 or younger.[10] By comparison, 31% and 5% of the non-Aboriginal population were less than 26 and 16, respectively.[11]

Aboriginal Population by Service Region, 2006

Geographic service region	Female	Male	Total	% of Alberta total
Calgary	18,085	16,465	34,550	18.3%
Central	5,650	5,575	11,220	6.0%
Edmonton	35,070	32,520	67,585	35.9%
Grande Prairie	6,400	6,240	12,640	6.7%
Keyano	3,300	3,600	6,905	3.7%
Lakeland	1,230	1,035	2,265	1.2%
Lethbridge	6,095	5,730	11,820	6.3%
Medicine Hat	1,470	1,565	3,040	1.6%
Northern Lakes	12,445	12,225	24,670	13.1%
Portage	6,880	6,790	13,675	7.3%
Alberta total	96,625	91,740	188,370	100.0%

Note: Percentages may not total due to rounding.
Source: Statistics Canada. Census of Population, 2006.

Persons with Disabilities

Based on data from the 2006 Participation and Activity Limitation Survey, an estimated 4.4 million Canadians (1 in 7) reported having a disability—an increase of over 750,000 people in five years. Of those 4.4 million, almost 40% (631,000) of those aged 15 and over and 69% of those aged 5 to 14 reported having a learning disability. As of 2006, 435,820 individuals in Alberta had a disability.[12]

Nationally, about 40% of Canada's 2006 disability rate can be explained by population aging.[13] As the population ages, the rate of disability rises. Since Alberta has a younger population than most of the other provinces, its disability rate was relatively low (13.6% compared to the national rate of 14.3%). However, as Alberta's population ages and the self-identification and diagnosis of persons with disabilities increases, the province will face increasing demands for supports.

In 2010–11, almost 78,000 children in Alberta's K–12 system were coded as having special education needs (including gifted and talented)—about 13% of the students.[14,15]

The number of students with disabilities will place increasing pressure on education systems (K–12 and post-secondary) to provide appropriate assessments and accommodations to support all learners.

Migration >>>

Post-secondary enrolment growth is affected by population growth, which in Alberta is strongly tied to levels of in-migration. While it is unlikely that even a strong level of migration to Alberta can reverse the population's aging trend, it can help keep population growth stable and slow the rate at which the population ages. Migration to Alberta is strongly influenced by Alberta's relative economic performance, and has been a major factor in the province's varying degrees of population growth. In times of strong economic growth, Alberta's population has grown at three to four times the rate of Canada's population, while in times of economic slowdown, the opposite occurs.

International Migration

Alberta's net international migration, including non-permanent residents, decreased between 2008 and 2010. However, it has since increased sharply from less than 15,000 in 2010 to over 25,000 in 2011, largely due to a recovery in the number of non-permanent residents.[16] Alberta attracted 12.4% of Canada's new immigrants in 2011, a substantial increase from 6.5% in 2001.[17] Net international migration to Alberta is expected to be about 24,700 people annually in 2050.[18]

While Alberta's educational attainment levels are on par with the Canadian average, there are indications of persistent underemployment in the highest-skilled occupational groups. This suggests that the province may not be optimizing the knowledge, skills, or experience of the highly skilled immigrants who choose Alberta as their home.[19]

There has been a noticeable trend toward increasing skill levels among Canadian immigrants since 1990.[20] Unlike in some other destinations, there is evidence that immigrants to Canada with low levels of education do not necessarily transfer the low levels of education to the next generation. Canada has among the lowest levels of intergenerational inequality transmission of all countries in the Organization for Economic Cooperation and Development. Later in life, the earnings of adults are not strongly tied to their parents' earning; this applies both to immigrants and to people born in Canada, and the relationship is actually weaker for immigrants.[21]

Canada's immigration policy and programs reflect a focus on attracting new immigrants with post-secondary education and technical skill sets. Recently, the shift has been toward attracting more economic immigrants. This shift has been reflected by an increase in immigrants under the Economic Class.[22]

Immigration to Alberta is largely driven by federal immigration policies.[23] The federal government aims to attract between 240,000 and 265,000 immigrants in 2012, maintaining this overall target for the sixth consecutive year.[24]

In 2011, about 9.4% of the 6.4 million working-age immigrants in Canada lived in Alberta. Alberta's immigrants accounted for 20.0% of its working-age population in 2011—the third-highest proportion among the provinces.[25]

Significant numbers of temporary foreign workers (TFWs) have entered the province through recruitment by Alberta employers. Employers use the TFW program when they cannot recruit locally. The need for TFWs indicates a labour and skill shortage in Canada. The flow of TFWs entering Alberta is expected to return to a more balanced condition, with the inflows being offset by outflows.[26]

Immigration to Alberta is uneven, with large urban centres receiving the overwhelming majority of Alberta's immigrants. Calgary and Edmonton accounted for almost 90% of total net immigration (59% and 29%, respectively) to Alberta between 2000 and 2009, while 12 out of Alberta's 19 census divisions (CDs) received virtually no immigrants during this period.[27]

As will be discussed later, Alberta is attracting more international students. With their skills and knowledge of Alberta society, this group of travellers could be an integral link in the province's relationships with other people and places. International students also have a wide range of valuable skills from which Albertans can learn and the economy can benefit.

Interprovincial Migration

In 2011, Alberta netted over 19,000 interprovincial migrants—over four times more than in 2010. Beginning in the first quarter of 2010, Alberta's interprovincial migration started to regain strength after two consecutive quarterly losses in the second half of 2009, when the province felt the effects of the global economic downturn. Alberta's interprovincial migration has since recovered, reporting the highest net interprovincial migration gain of the provinces in 2010 and 2011.[28]

While Alberta welcomed residents from every province, Ontario contributed the most to Alberta's net interprovincial gain, followed by British Columbia. The majority of the province's interprovincial migrants typically settle in Calgary and Edmonton, as is the case with immigrants. However, every CD in the province has seen positive average net interprovincial migration over recent years. Areas undergoing major economic development have seen substantial interprovincial in-migration; Wood Buffalo (CD16) saw net interprovincial migration more than triple, from about 1,000 people in 2000 to about 3,800 in 2009.[29]

Intraprovincial Migration

Intraprovincial migration is the movement of people within Alberta. Data at the CD level indicates that CD6 (which includes Calgary), CD8 (which includes Red Deer), and CD11 (which includes Edmonton) received the majority of net inflow of intraprovincial migration between 2000 and 2009.[30]

Most intraprovincial movement is from smaller centres and rural regions to urban centres. This movement mirrors a global urbanization trend as people migrate to cities for economic and educational opportunities. Migration toward urban centres may translate into higher demand for seats at post-secondary institutions within these communities, and less demand in rural areas. Regional partnerships between urban and rural institutions may be an effective strategy for addressing this demand. As regional stewards and sizable institutions within their communities, rural/regional post-secondary institutions may be able to play a role in attracting talent to their communities and contributing to the long-term vitality and sustainability of these communities.

Net Intraprovincial Migration by Service Region, 2002-2011

Geographic service region	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10-year average
Calgary	1,146	336	955	1,720	-231	-1,149	636	1,371	1,973	1,973	**873**
Central	359	673	860	1,117	1,583	1,636	769	638	-203	-203	**723**
Edmonton	2,706	1,140	363	2,004	2,724	2,008	2,248	2,984	2,720	2,720	**2,162**
Grande Prairie	-662	-503	30	-95	-145	-1,074	-985	-1,068	-977	-977	**-645**
Keyano	-129	220	-31	-1,232	-1,993	-1,723	-2,120	-1,701	-907	-907	**-1,052**
Lakeland	-357	-209	-314	-359	-143	259	81	-212	-235	-235	**-172**
Lethbridge	-968	-428	-597	-1,173	-491	387	-117	-472	-605	-605	**-507**
Medicine Hat	-507	-71	244	-200	-206	567	177	-45	-274	-274	**-59**
Northern Lakes	-1,220	-1,049	-934	-1,243	-1,024	-846	-752	-1,002	-1,094	-1,094	**-1,026**
Portage	-368	-109	-576	-540	-73	-66	64	-492	-398	-398	**-296**

Note: Data for 2010 has been restated and will not match that reported in CAPR 2011. Given that there is no reliable data for preliminary intraprovincial migration estimates, the data of the most recent year, for which final estimates are available is used. It is assumed that intraprovincial migratory behaviours of the current year are similar to those of the last year for which final estimates are available.
Source: Statistics Canada, Alberta Treasury Board and Finance, 2012.

Educational Attainment and Literacy >>>

Educational attainment and literacy skills affect people's ability to undertake daily tasks, obtain and maintain employment and pursue further learning. High educational attainment indicates a skilled, knowledgeable, and engaged population able to create and take advantage of economic opportunities. Alberta's ability to achieve social and economic progress is, in many ways, tied to educational attainment and literacy. For Alberta to remain the competitive province that it is and maintain its high quality of life, continuing high rates of literacy and educational attainment are vital.

Literacy

Higher literacy is associated with higher income and higher educational attainment, as well as a better quality of life—including improved health and greater levels of civic engagement.[31,32] In Alberta, data from the 2003 International Adult Literacy and Life Skills Survey (IALSS)[33,34] shows that Albertans with lower literacy also had worse health. Across Canada, the average document literacy score of individuals aged 16–65 who reported being in poor health corresponded to Level 2 proficiency. Those in fair, good, or excellent health had scores corresponding to Level 3 proficiency.[35] Level 3 roughly equates to high school completion, which means individuals have the minimum foundational skills necessary to function in the knowledge economy.

Data also shows that literacy is strongly related to employability and type of employment. Among employed Canadians, about 62% have average document literacy scores at Level 3 or above; among unemployed Canadians, over 50% have document literacy scores below Level 3. Occupations requiring higher levels of problem solving, critical thinking, and analysis typically require high literacy levels (i.e., 4 or 5).[36] With strong literacy skills, people are more adaptable to changing circumstances, less vulnerable to economic shocks, and more able to acquire new skills, whether through formal learning or on-the-job training.

People with higher levels of literacy are also more likely to participate in lifelong learning. Canadians with prose literacy scores of Level 1 have an adult learning participation rate of 20% compared to 70% for individuals at Level 4 or 5. About 80% of Canadians with a university degree participate in active forms of learning,[37] compared to 57% of Canadians with high school completion.[38]

As discussed below, Albertans' level of educational attainment has increased over the past decade. Similar progress has not occurred in levels of literacy. Alberta posts comparatively healthy levels of literacy, yet the proportion of adult Albertans with foundational literacy did not increase in the decade between the first international literacy survey in 1994 and the second in 2003.[39]

According to the most recent IALSS, 61% of Albertans 16 years of age and older performed at literacy Level 3 or better in 2003, above the Canadian average of 52%.[40]

It is important to ensure that adult learners have foundational skills, such as literacy, and access to a wide range of learning opportunities. There is significant diversity in the needs of learners, meaning that adult learning providers need to be responsive and ensure that learners at all levels have access to the training that meets their unique situation.

IALSS Adult Literacy Levels

	Level	Description
	Level 5	Very strong skills. Able to find information in dense text and make high-level inferences or use specialized background information.
Foundational levels	Level 4	Strong skills. Able to integrate and synthesize information from complex or lengthy passages.
Minimum skills for the knowledge economy →	Level 3	Adequate skills to cope in a complex and advanced society. Equivalent skill level to high school completion or college entry.
	Level 2	Weak skills. Able to deal with simple, clearly laid-out material. May be able to cope with everyday demands, but has difficulty with new situations.
	Level 1	Poor skills. May not be able to determine the correct dosage form a medicine bottle label.

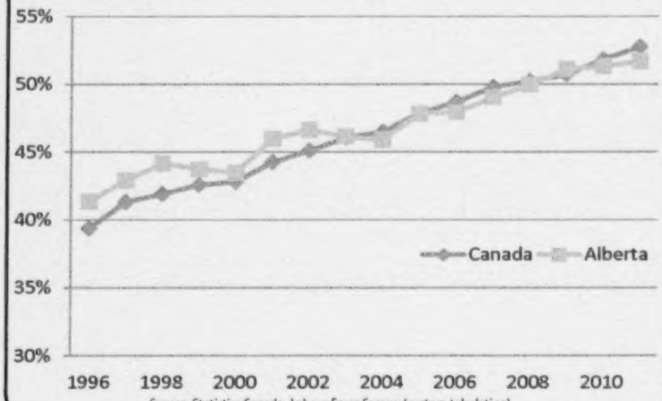
Educational Attainment

As technology advances, the demand for highly skilled, educated workers will increase. Alberta needs a workforce with a range of completed programs and credentials, from certificate programs to graduate degrees. With today's worker expected to have three careers and eight jobs over a lifetime,[41] there will be increasing pressure on individuals to maintain and upgrade their skills to keep pace with technology and change. In 2007, Service Canada estimated that 65% of all new jobs created between then and 2012 would require some form of post-secondary education;[42] thus, a post-secondary credential is replacing the high school diploma as the key to labour market entry and a link to economic health and quality of life.

Educational Attainment and Literacy >>>

In recent years, Alberta has shown educational attainment levels comparable to the Canadian average. These levels are partly due to the province's relatively strong economy, which continues to draw young, skilled migrants who already have education and training, and are looking for work. In 2001, 44.3% of Canada's population aged 15 years and over had completed some form of post-secondary education. By 2011, this proportion had increased to 52.7%. In 2001, 46.0% of Alberta's population aged 15 years and over had attained post-secondary qualifications; in 2011, this figure had risen to 51.7%.[42]

Proportion of the Population Aged 15+ Years with PSE, Alberta and Canada



Source: Statistics Canada. Labour Force Survey (custom tabulation).

Alberta Human Services projects that by 2021, the proportion of Albertans with a post-secondary education will increase to 59.3%. It forecasts that the proportion of females with post-secondary education in 2021 will exceed that of males, 62.3% compared to 56.4%. The largest average annual change in educational attainment over the forecast period of 2011–21 is at the university level (a 3.7% increase), with the next-largest average annual change being at the college and trade level (a 2.0% increase).[43]

The greatest change in Albertans' educational attainment over recent years has been in the proportion of the labour force with a university degree, which increased from 20.8% in 2006 to 22.4% in 2011.

The proportion of Alberta's labour force with at least a high school diploma is increasing, from 83.9% in 2001 to 87.6% in 2011. However, in 2011, 23.4% of Alberta's labour force had a high school diploma as their highest level of educational attainment; this figure was higher than the Canadian figure of 19.9%.[44] It indicates that the proportion of Albertans in the labour force who do not have post-secondary education is higher than in other provinces, or that Alberta's labour force is somewhat less skilled. Post-secondary institutions are competing with a strong labour force as many young Albertans opt to join the workforce after completing high school, as opposed to pursuing higher learning opportunities. Government and post-secondary institutions may need to better communicate with learners and ensure they understand the long-term benefits of having a post-secondary education.

High school completion rates vary across the province, from a high of 83.8% in the Lakeland region to a low of 67.7% completing high school within five years of entering Grade 10 in the Northern Lakes region in 2010–11. Provincially, 74.1% of Albertans complete high school within three years of entering Grade 10. As the length of time after entering Grade 10 increases, so does the completion rate, with 79.6% of Albertans completing high school within five years of entering Grade 10.[45]

High School Completion Rate by Service Region, 2010-11

Geographic service region	3-year rate	4-year rate	5-year rate
Calgary	77.1%	80.8%	81.8%
Central	77.0%	80.4%	81.1%
Edmonton	72.6%	76.5%	78.7%
Grande Prairie	70.8%	78.9%	77.9%
Keyano	74.6%	78.0%	78.7%
Lakeland	75.4%	81.5%	83.8%
Lethbridge	76.8%	82.1%	81.3%
Medicine Hat	76.9%	78.8%	79.5%
Northern Lakes	59.0%	61.6%	67.7%
Portage	63.8%	71.0%	74.4%
Alberta	74.1%	78.1%	79.6%

Notes: Results include all public, separate, charter, francophone, and private schools in Alberta with a high school program. Historical results may have been restated using current mapping.
Source: Alberta Education.

Educational Attainment and Literacy >>>

Aboriginal Educational Attainment

The educational attainment of Aboriginal Albertans increased significantly between 2001 and 2006. The proportion of Aboriginal Albertans with post-secondary education grew from 29.0% in 2001 to 34.3% in 2006—an increase of 5.3%. This rate of increase is slightly higher than the increase for the non-Aboriginal population over the same time frame. This increase becomes even more significant in light of the Aboriginal population's higher youth and fertility rates.

Improved labour market and socio-economic outcomes for Aboriginal Albertans occur in tandem with improvements in educational attainment. As Aboriginal Albertans are one of the few growing, young populations, strategies to support their post-secondary access and completion are a priority.

Proportion of Aboriginal Albertans with Post-secondary Education, Alberta and Regions

	2001		2006	
Geographic service region	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Calgary	32.1%	51.0%	40.0%	56.2%
Central	30.8%	40.3%	33.5%	44.2%
Edmonton	30.1%	45.8%	35.6%	51.4%
Grande Prairie	24.2%	39.5%	32.2%	43.1%
Keyano	26.2%	52.0%	34.4%	57.2%
Lakeland	31.8%	37.7%	34.5%	41.8%
Lethbridge	30.9%	40.2%	35.8%	45.3%
Medicine Hat	28.8%	36.0%	32.5%	41.1%
Northern Lakes	23.1%	38.2%	22.4%	39.8%
Portage	29.7%	39.5%	33.5%	44.1%
Alberta	29.0%	46.1%	34.3%	51.2%

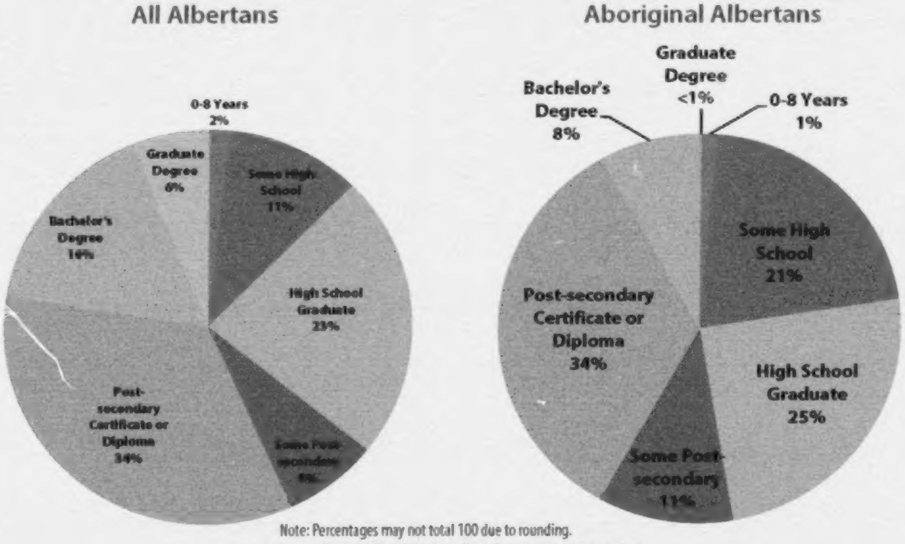
Source: Statistics Canada. Census of Population (custom tabulation).

Post-secondary Completion

In order to better understand post-secondary completion in Alberta, EAE is currently in the process of putting together an algorithm to track new students in each credential out to completion.

Data from the 2006 Early Leavers Survey indicates that the most common reasons students cited for not completing a post-secondary credential included changing their mind or losing interest in their course of study, along with personal reasons (including family illness or travel). The Alberta Health Early Leavers Study involved a more recent survey, which targeted people who enrolled in a health program in either the 2007–08 or 2008–09 academic year and left that program of study before completion. The most-cited main reasons for leaving health programs were academic / asked to leave (25.3%), personal/health reasons (19.1%), quality of program/instruction (12%), did not like / lack of interest / loss of motivation (11.7%), and changed career goals / transferred (10.4%).[47]

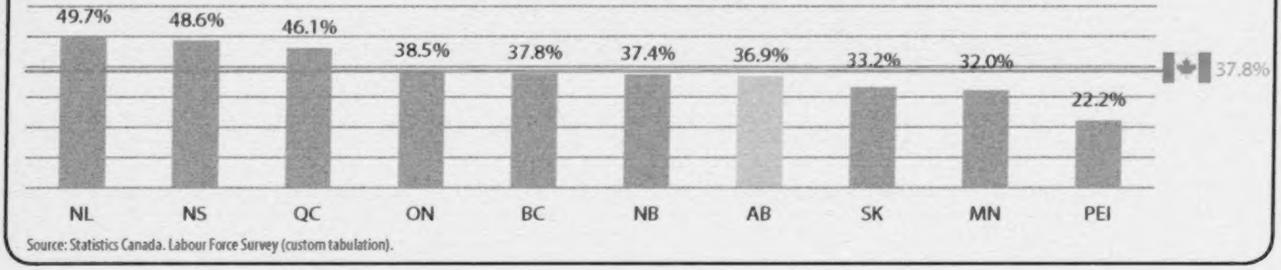
Educational Attainment of Albertans in the Labour Force, Aged 15+ Years, 2011



Note: Percentages may not total 100 due to rounding.
Source: Statistics Canada. Labour Force Survey (custom tabulation)..

Educational Attainment and Literacy >>>

Proportion of Aboriginal Canadians Aged 15+ Years with Post-secondary Education, Canada and Provinces, 2011



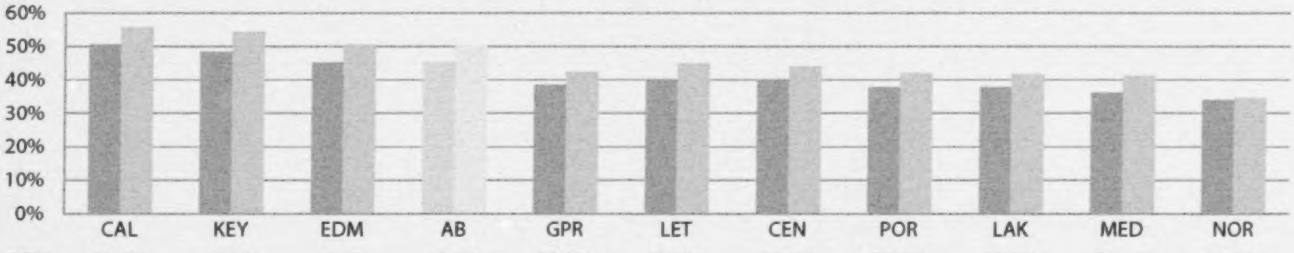
Source: Statistics Canada. Labour Force Survey (custom tabulation).

Proportion of the Population Aged 15+ Years with Post-secondary Education, Canada and Provinces

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Alberta	**46.0%**	**46.6%**	**46.1%**	**45.9%**	**47.8%**	**47.9%**	**49.0%**	**50.0%**	**51.1%**	**51.3%**	**51.7%**
British Columbia	43.8%	44.1%	45.0%	45.9%	46.4%	46.9%	48.3%	48.9%	49.0%	50.5%	52.3%
Manitoba	39.8%	40.0%	40.7%	40.8%	41.4%	41.6%	41.4%	43.1%	43.9%	45.3%	45.3%
New Brunswick	40.5%	40.1%	41.1%	42.5%	42.5%	44.0%	44.5%	46.1%	46.4%	46.6%	47.1%
Newfoundland and Labrador	39.9%	41.7%	43.8%	42.7%	44.2%	43.3%	44.2%	45.2%	46.9%	48.7%	49.9%
Nova Scotia	47.0%	46.3%	47.5%	48.9%	48.5%	48.4%	48.8%	47.9%	50.3%	52.7%	52.3%
Ontario	44.7%	45.6%	46.4%	46.8%	48.5%	49.6%	51.1%	51.4%	51.6%	52.7%	53.5%
Prince Edward Island	41.9%	43.1%	44.0%	46.2%	46.0%	46.0%	45.2%	44.8%	46.5%	47.7%	47.7%
Québec	44.8%	46.3%	47.9%	48.4%	50.0%	51.1%	51.9%	52.1%	52.5%	53.8%	54.9%
Saskatchewan	38.7%	39.4%	41.9%	41.3%	41.9%	42.4%	43.1%	43.4%	44.2%	45.7%	46.2%
Canada	**44.3%**	**45.1%**	**46.0%**	**46.5%**	**47.8%**	**48.7%**	**49.8%**	**50.2%**	**50.7%**	**51.8%**	**52.7%**

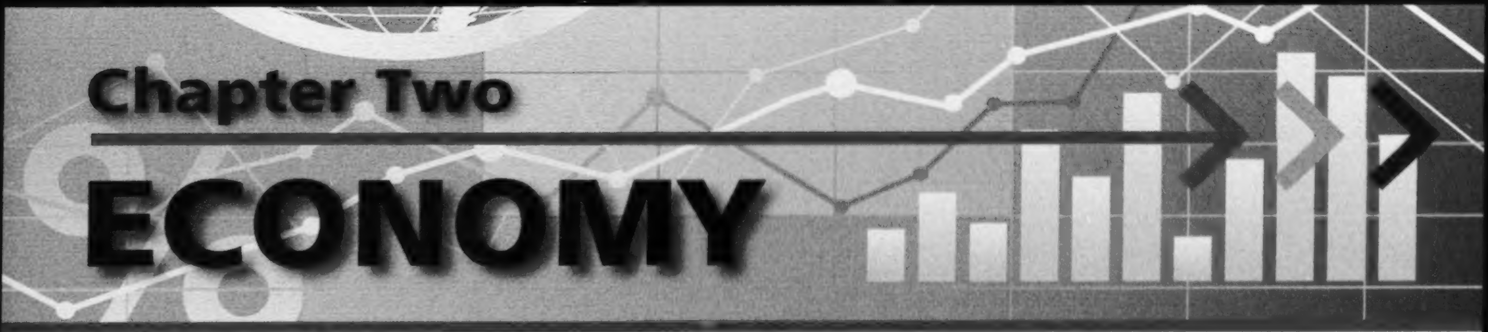
Source: Statistics Canada. Labour Force Survey (custom tabulation).

Proportion of the Population Aged 15+ with Post-secondary Education, Alberta and Service Regions, 2001 and 2006



	CAL	KEY	EDM	AB	GPR	LET	CEN	POR	LAK	MED	NOR
2001:	50.5%	48.3%	45.1%	45.3%	38.5%	39.8%	40.2%	37.9%	37.8%	36.1%	34.0%
2006:	55.7%	54.3%	50.6%	50.4%	42.3%	44.8%	44.0%	42.0%	41.6%	41.1%	34.8%

Source: Statistics Canada. Census 2001 and 2006. (custom tabulations).



Chapter Two

ECONOMY

Overview >>>

In Alberta, post-secondary enrolment growth is strongly tied to the economy. While there are variations among programs and learner populations, post-secondary enrolment trends are generally counter-cyclical relative to economic trends: as the strength of the economy declines, post-secondary enrolment tends to increase as people wait out a weak job market by upgrading their skills or training. Maintaining the right degree of flexibility in the system will be a challenge as post-secondary demand fluctuates with the province's economic context.

CHAPTER HIGHLIGHTS:

- Alberta's economy enjoyed robust growth despite the slowing down of the global economy. The province's GDP growth rate in 2011 was 5.2%. Its economic growth is expected to be 3.8% in 2012.
- While the province's economic outlook is strong, it is not immune to global economic forces. Small changes in the fiscal assumptions that underlie its economic outlook can substantially impact government revenue streams.
- Alberta had one of the lowest unemployment rates (5.5%) in Canada in 2011. While the overall unemployment rate is low, unemployment is higher among some population groups, including Aboriginal Albertans and youth.
- Economic growth and low unemployment rates indicate that Alberta should expect to have labour shortages for the foreseeable future. Most labour market shortages over 2011–21 are forecasted for the trades and technology, health sciences, and business program bands.

KEY QUESTIONS:

- How can Alberta stay competitive in an uncertain worldwide economic environment? What is the role of post-secondary education in helping it compete?
- How can post-secondary institutions prepare and plan for the future in an uncertain economic environment?

Budget 2012 and Economic Outlook >>>

Budget 2012

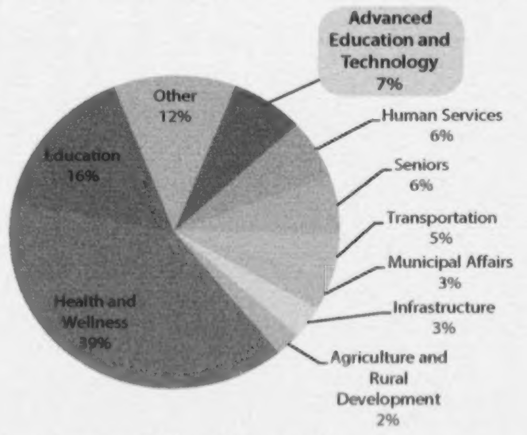
Advanced Education and Technology's total budget for 2012–13 is $2.9 billion.* As in previous years, publicly funded institutions receive one Campus Alberta grant as base operating funding, giving institutions more flexibility to prioritize needs. In the 2012–13 budget, the Campus Alberta grants to post-secondary institutions increased by 2% over 2011–12 levels. The budget for innovation is $275 million, an increase of 3.4%. Investment in Alberta's priority research areas and technology commercialization through the Alberta Innovates Corporations for 2012–13 is $216 million. The 2012–13 budget also allocates $200 million for student financial assistance through loan remission and debt management programs, scholarships, bursaries, and grants, as well as $274 million for student loans.[48,49,50]

Economic Outlook

The global economy has been growing since the financial crisis of 2008, although the growth has been moderating as a result of the European crisis, debt problems in advanced economies, and signs of slowdown in emerging markets. In 2011, the global economy is estimated to have grown by 4%, but growth for 2012 is projected to be lower (3%). Canada's economy is projected to grow by 2.0% in 2012 and 2.7% per year over the medium term.** While Canada's economy has regained the jobs and output lost during the recession, it continues to face some challenges, including the strong Canadian dollar, slower global growth, and increased household debt.[51]

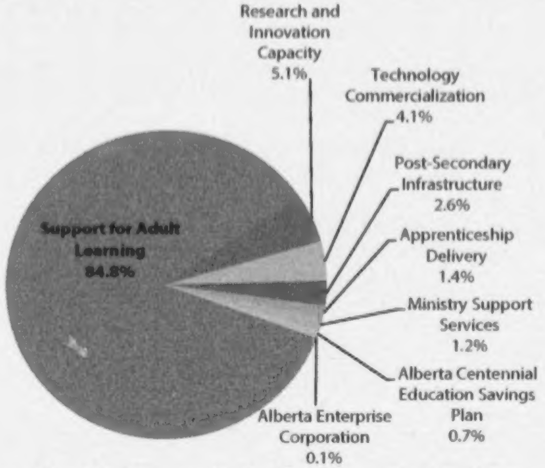
Alberta's economy enjoyed robust growth despite the slowing down of the global economy. Alberta had the highest employment growth (3.8%) in Canada in 2011, and Alberta's GDP growth rate in 2011 was 5.2%. Alberta's economic growth is expected to be 3.8% in 2012 and 2013 before averaging 3% in 2014 and 2015. Employment growth is forecast to be 2.7% in 2012 and about 2% annually over the medium term. Low interest rates, a high level of capital investment led by the oil sands sector, high oil prices and increased oil exports, and strong manufacturing and agricultural sectors are expected to drive the expansion of Alberta's economy in 2012, compensating for the natural gas sector, which is expected to remain weak.[52] The Conference Board of Canada forecast shows that Alberta will have the highest growth (3.8%) of any province in Canada in 2012; however, it has lowered its forecast for Alberta in 2013 to 3% due to the volatile and discounted Canadian crude oil prices, which are weighing on the profitability of energy projects.[53]

GOA Budget by Ministry, Budget 2012 (Total Budget $41.1 billion)



Source: Government of Alberta, Budget 2012.

AET Budget by Function, Budget 2012 (Total Budget: $2.9 billion)



Source: Advanced Education and Technology Business Plan 2012-15.

Total GOA revenues are expected to grow to $40.3 billion in 2012–13, an increase of $1.8 billion from the previous year. This increase can be attributed to the higher tax revenues stemming from economic growth, federal transfers, and investment income. GOA expenses in 2012–13 are expected to be $41.1 billion, an increase of $1.3 billion compared to 2011–12.[54]

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*Budget 2012 was released by the GOA prior to the formation of the current department of Alberta Enterprise and Advanced Education. The budget analysis in this document uses the former department of Advanced Education and Technology as its framework.

**The economic data included in this section is based on the GOA's 2012–13 budget, released on February 9, 2012. The government publishes quarterly fiscal updates to change or add to the information already in the budget. Readers are requested to refer to the quarterly update releases to get a more current picture of the economic estimates and trends. The first quarterly update to the budget was in August 2012 (http://www.finance.alberta.ca/publications/budget/index.html).

Budget 2012 and Economic Outlook >>>

While Alberta is expected to enjoy a period of economic growth, even small changes in oil prices, exchange rates, and interest rates could substantially impact the government's revenue stream. The following table provides some examples of how small changes can result in revenue loss for the province:

Sensitivities to Fiscal Year Assumptions, 2012-13

	Change	Net Impact
Oil Price	-$1	-$223 million revenue
Natural Gas Price	-10 Cents	-$28 million revenue
Exchange Rate	+1 Cent	-$247 million revenue
Interest Rates	+1%	-$223 million revenue
Personal Income	-1%	-$119 million revenue

Source: Government of Alberta 2012-15 Fiscal Plan Volume: Economic Outlook.

Alberta's economic fortunes are also susceptible to global economic trends. Several factors could impact the province's economic growth: escalation of the eurozone financial crisis could affect the global banking system, deceleration in emerging markets or large increases in oil prices could slow down global economic growth, uncertainty in the U.S. economy or an appreciation of the Canadian dollar could affect trade with the U.S., and Alberta's exports and a tight labour market could worsen labour shortages and drive up costs.[55]

In general, there is an inverse relationship between unemployment and educational attainment: as the level of educational attainment increases, unemployment

Key Energy and Economic Assumptions, Alberta Budget 2012

Fiscal Year Assumptions	2010-11 actual	2011-12 estimates	2012-13	2013-14	2014-15
Revenue (CDN$millions)	35,034	38,499	**40,263**	43,989	49,044
Expenses (CDN$millions)	38,444	39,817	**41,149**	43,037	43,851
Surplus/(Deficit) (CDN$millions)	-3,410	-1,318	**-886**	952	5,193
Crude Oil Price					
West Texas Intermediate WTI (US$/bbl)	83.38	96.25	**99.25**	106.25	108.25
Alberta Wellhead (Cdn$/bbl)	73.57	89.27	**90.18**	96.94	99.04
Western Canadian Select (WCS) @ Hardisty (Cdn$/bbl)	66.70	77.98	**83.28**	91.23	92.94
Natural Gas Price					
Alberta Reference Price (Cdn$/GJ)	3.28	3.11	**3.00**	3.50	4.25
Exchange Rate (US¢/Cdn$)	98.40	100.30	**98.60**	99.00	99.00
Calendar Year Assumptions	**2011 Actual**	**2012**	**2013**	**2014**	**2015**
Real GDP (millions of 2002 dollars)	189,622	**196,913**	204,470	210,588	216,883
Unemployment rate (per cent)	5.5	**4.9**	4.6	4.3	4.0
Alberta Consumer Price Index (per cent change)	2.4	**2.5**	2.3	2.3	2.3

Source: Government of Alberta 2012-15 Fiscal Plan Volume: Economic Outlook.

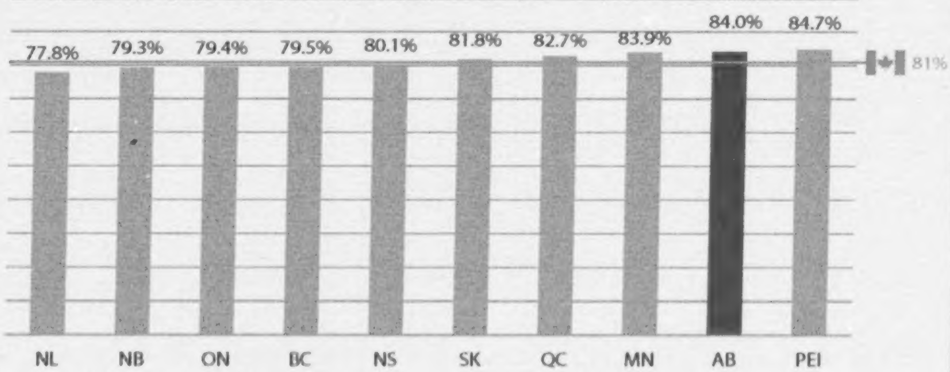
Employment and Labour Market Participation >>>

decreases. In 2011, Albertans with a post-secondary credential had an unemployment rate of 3.9%, compared to 5.7% for those with a high school diploma as their highest level of education.

Alberta enjoys one of the strongest labour markets in Canada and is expected to remain strong as the economy continues to grow. Alberta's labour market participation is above the national average, and its unemployment rate has dropped for the past two years and is currently one of the lowest in the country. In 2011, the province added 77,500 jobs, including 75,000 full-time jobs, and its employment growth rate (3.8%) was the highest among all provinces in Canada.[36] Alberta's economy is expected to grow in the medium term and is projected to add 206,300 jobs in 2012–15, with the majority of these jobs requiring post-secondary education.[37]

While positive, these numbers once again highlight that strong economic growth will also increasingly require Alberta to develop or attract and retain more skilled professionals capable of meeting rising labour market demand. While many strategies are needed to fulfill this objective, the role that Alberta's post-secondary system has in training skilled professionals will grow in importance. The role of new Albertans (immigrants and in-migrants) will also be key in ensuring strong economic and employment growth.

Labour Force Participation Rate, 18-34 years, Canada and Provinces, 2011



Source: Statistics Canada. Labour Force Survey (custom tabulation).

Unemployment Rates (%), Canada and Provinces

15+ years	2003	2004	2005	2006	2007	2008	2009	2010	2011
Alberta	5.1	4.7	4.0	3.4	3.5	3.6	6.6	6.5	5.5
British Columbia	8.0	7.2	5.8	4.8	4.3	4.6	7.7	7.6	7.5
Manitoba	5.0	5.3	4.8	4.3	4.4	4.2	5.2	5.4	5.4
New Brunswick	10.2	9.7	9.6	8.7	7.5	8.5	8.8	9.3	9.5
Newfoundland and Labrador	16.4	15.6	15.1	14.7	13.5	13.2	15.5	14.4	12.7
Nova Scotia	9.1	8.8	8.4	7.9	8.0	7.7	9.2	9.3	8.8
Ontario	6.9	6.8	6.6	6.3	6.4	6.5	9.0	8.7	7.8
Prince Edward Island	11.1	11.2	10.8	11.1	10.3	10.8	12.1	11.2	11.3
Québec	9.2	8.5	8.3	8.1	7.2	7.2	8.5	8.0	7.8
Saskatchewan	5.6	5.3	5.1	4.7	4.2	4.1	4.8	5.2	5.0
Canada	7.6	7.2	6.8	6.3	6.0	6.1	8.3	8.0	7.4
18-34 years	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Alberta	5.8	5.8	4.7	3.9	4.2	4.3	7.8	7.7	6.4
British Columbia	9.5	8.3	6.7	5.5	4.9	5.7	9.2	9.6	8.9
Manitoba	6.2	6.7	6.3	5.1	5.3	5.2	6.4	7.0	6.9
New Brunswick	12.1	11.1	11.0	9.2	8.5	10.0	10.2	10.8	10.6
Newfoundland and Labrador	19.2	18.9	17.4	17.7	15.2	15.0	16.9	15.8	14.4
Nova Scotia	10.9	11.1	10.2	9.5	9.2	9.6	12.0	11.3	11.3
Ontario	8.6	8.6	8.3	8.0	8.0	8.2	11.4	10.8	9.9
Prince Edward Island	12.4	13.3	12.5	11.8	10.8	11.8	13.2	13.3	12.8
Québec	10.3	9.6	9.3	8.8	8.2	7.9	9.5	8.8	8.5
Saskatchewan	7.4	7.1	6.5	6.1	5.5	4.9	6.1	6.7	6.3
Canada	9.0	8.6	8.0	7.4	7.1	7.3	9.9	9.6	8.9

Source: Statistics Canada. Labour Force Survey (custom tabulation).

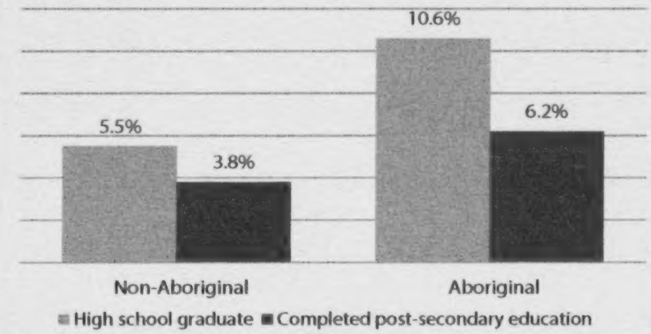
Employment and Labour Market Participation >>>

Aboriginal Employment

In 2011, 67.7% of Aboriginal Albertans living off-reserve participated in the labour force, compared to 73.7% of Albertans. The unemployment rate for Aboriginal people living off-reserve was 11.1% in 2011, which was 5.6% higher than the unemployment rate for Alberta's working-age population.[58]

While there are significant differences between Alberta's Aboriginal and non-Aboriginal populations, there are also some differences across genders and Aboriginal subpopulations. The Aboriginal females' participation rate of 59.8% was lower than the 76.2% rate for their male counterparts. Among Aboriginal groups, the North American Indian population (12.2%) had a higher unemployment rate than the Métis population (10.2%). The difference between North American Indian (12.5%) and Métis (7.0%) females was even greater, at 5.5%, showing a substantial difference in the unemployment rate by gender within Aboriginal subpopulations.[59]

Unemployment Rate by Educational Attainment & Aboriginal Status, Alberta, 2011



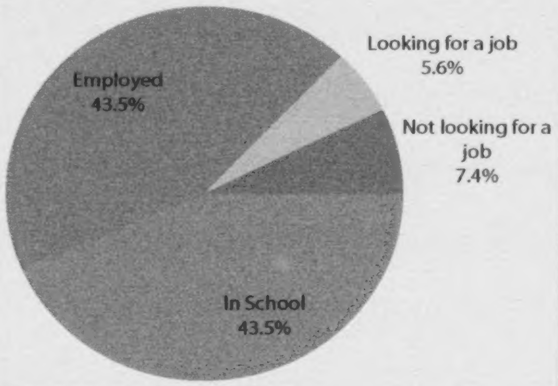
Source: Statistics Canada. Labour Force Survey (custom tabulation).

As with the non-Aboriginal population, there is an inverse relationship between unemployment and educational attainment: as the level of educational attainment increases, unemployment decreases. In 2011, Aboriginal Albertans with a post-secondary credential had an unemployment rate of 6.2%, compared to 10.6% for those with a high school diploma as their highest level of education.[60] Aboriginal Albertans continue to face higher unemployment levels than the non-Aboriginal population, even when holding commensurate levels of education.

Youth Unemployment

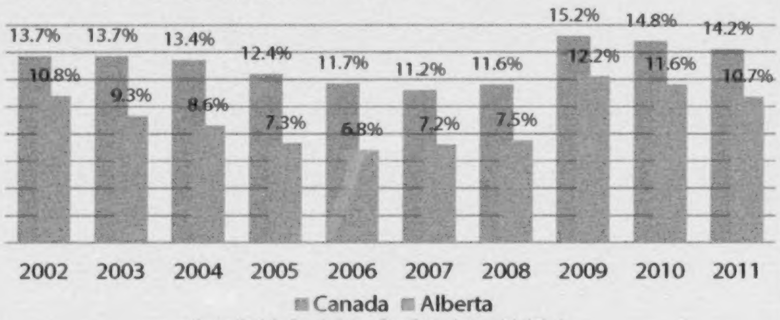
In 2011, 904,000 (13%) of the 6.8 million Canadians aged 15 to 29 were neither in school nor employed. Of these, 391,000 were looking for work, and 513,000 were not looking for work. The remaining 5.9 million youth were equally split into those in school and those with a job. The 391,000 unemployed youth represented an unemployment rate of 11.8% among young people not in school. Among the unemployed, 55,000 were

Canadian Youth (15-29 years), 2011



Source: Statistics Canada. *The Daily*, March 23, 2012.

Youth (15-24 years) Unemployment Rate, Alberta & Canada



Source: Statistics Canada. Labour Force Survey (custom tabulation).

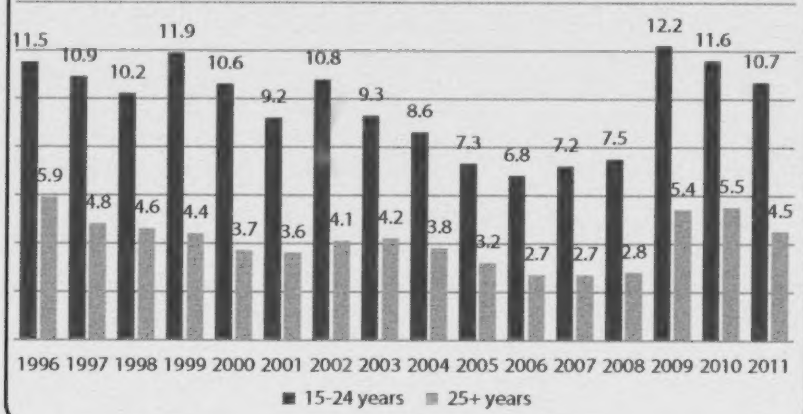
Employment and Labour Market Participation >>>

long-term unemployed (looking for work for more than six months) and represented 1% of all youth and 14% of unemployed youth.[61]

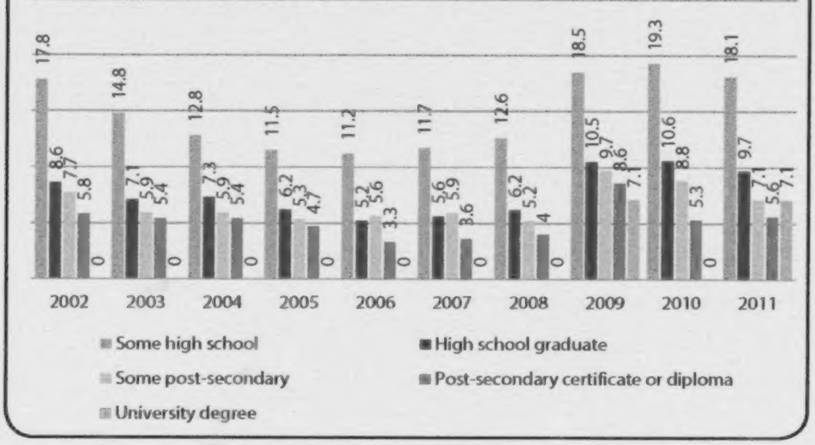
Among the provinces, Alberta had the third-largest (16.9%) proportion of youth (15–24 years) in the working-age (15+ years) population in 2011, after Manitoba (17.3%) and Saskatchewan (17.1%).[62] Alberta's youth unemployment rate in 2011 (10.7%) was lower than the Canadian average of 14.2%.

Youth unemployment is substantially higher than unemployment among older Albertans. Additionally, unemployment rates are higher among youth with lower levels of education.

Unemployment Rate by Age Groups, Alberta



Youth Unemployment Rate by Education Levels, Alberta



Employment and Labour Market Participation >>>

Persons with Disabilities in the Workplace

Persons with disabilities tend to have lower labour force participation rates and higher unemployment rates. They also tend to work fewer hours than people without disabilities, making them more vulnerable to periods of lower income.[63] In 2006, the labour force participation rate for persons with disabilities in Alberta was 70.7%, compared to 83.9% for persons without disabilities.[64] The unemployment rate for persons with disabilities was 5.5%, compared to 3.5% for persons without disabilities.[65] Persons with disabilities were those who reported difficulties with daily living activities, or who indicated that a physical or mental condition or health problem limited the kind or amount of activity they could do.

Participation and Activity Limitation Survey in 2006 identified a total of 276,790 persons with disabilities as being engaged in trades, transport and equipment operation, and related occupations. The only occupation with higher numbers was sales and service (465,470). The third-highest was business, finance, and administrative positions (262,260).[66]

Increased labour market opportunities for persons with disabilities will influence post-secondary participation, as opportunities increase for persons with disabilities who have higher levels of educational attainment. Persons with disabilities represent a group of Albertans who are currently underutilized in the labour force. As is the case with other under-represented groups, persons with disabilities can be leveraged more effectively to aid in offsetting labour market pressures.

Immigrants in the Labour Market

Approximately 600,000 immigrants of working age (15+ years) lived in Alberta in 2011, representing 9.4% of Canada's working-age immigrant population. Alberta had the highest labour force participation (70.2%) and employment rate (66.2%) of immigrants among the provinces in 2011. Still, immigrant Albertans accounted for 19.7% of the province's unemployed.[67] The national unemployment rate for recent immigrants in the prime working-age group is more than double the rate of those born in Canada.[68] On average, immigrants in Alberta earned $1.65 less per hour than the overall Alberta population in 2011.[69]

Persistent gaps between immigrant and non-immigrant Albertans' success in the labour market will impact the province's ability to attract and retain highly skilled individuals. Addressing the most challenging labour market barriers for new Canadians—the lack of Canadian work experience, the lack of recognition for foreign credentials, and language barriers—would support new Albertans and the province in meeting our current and future demographic, labour, and skill needs. It is apparent that new immigrants may require additional training or skills development (particularly linguistic skills) in order to successfully transition into Alberta's labour force. The province's post-secondary system is therefore well positioned to continue its important work of providing immigrants with the skills and training needed to facilitate these transitions.

Economy and Post-Secondary Education>>>

In general, post-secondary enrolment trends are counter-cyclical relative to economic trends. When the economy is strong, post-secondary enrolment growth tends to slow as individuals take advantage of labour market opportunities. When the economy weakens, post-secondary enrolment tends to grow as people seek to retrain or upgrade to take advantage of labour market opportunities when the economy recovers.[70]

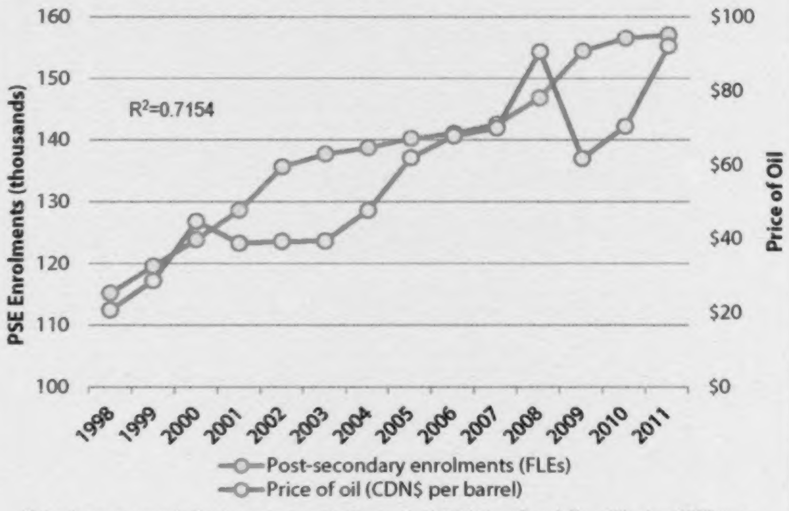
In Canada, effects of past economic downturns on post-secondary enrolment varied depending on the type of post-secondary program. Recessions tended not to affect enrolment in four-year programs. However, economic downturn resulted in significant decreases in apprenticeship registrations and course completions whereas enrolments in shorter programs, such as certificate, diploma, or master's degree programs, generally increased.[71]

During the period 2003–08, Alberta's post-secondary enrolment (full-load equivalent) increased by an annual rate of 0.6% to 1.3%. However, during the recessionary period (2008–09 and 2009–10) post-secondary enrolment increased by 3.0% and 5.2%, respectively—the largest increases since 2002–03. Increase in annual system-level enrolment for 2010–11 was 1.3%, which is similar to the pre-recessionary levels. However, as the province moves into a sustained period of economic strength and more jobs become available, these types of enrolment increases may not continue.

As indicators of economic strength, unemployment rates and the price of oil were correlated against post-secondary enrolment to see how these economic variables affect post-secondary enrolment. Data suggests a moderately strong relationship between the price of oil and enrolment in Alberta's publicly funded advanced education system. Historically, the relationship between post-secondary enrolment and unemployment has been the stronger of the two economic variables. Monitoring these elements will continue.

Demand for student financial assistance is closely linked to both demand for post-secondary education and the strength of the economy. It can also have significant budgetary implications. Combined with the increased numbers of learners applying to post-secondary institutions, the economic downturn also saw higher youth unemployment levels, contributing to learners' financial need. During the recent recession, as demand for post-secondary education rose, so too did demand for student financial assistance. From 2008 to 2010, the number of people receiving student financial assistance in Alberta increased by about 40%. In 2011, the number of funded learners remained fairly stable, reflecting an improved economic and labour market environment in Alberta. These figures show the significant linkage between the economy and the need for student financial assistance. Government and adult learning providers will need to be aware of economic trends, which demonstrably have a clear tie to students' ability to pay for (i.e., participate in) post-secondary learning.

Oil Price and Post-secondary Enrolment, Alberta



Note: Average annual oil prices are presented in constant 2002 Canadian dollars. Oil prices (WTI) were converted from US dollar figures into Canadian dollars using the yearly exchange rate average and then adjusted using Canadas Consumer Price Index.
Source: Alberta Enterprise and Advanced Education - Learner and Enrolment Reporting System (LERS), Energy Information Administration (EIA).

Socio-economic Status and Post-secondary Education

Living in low-income circumstances may hinder children's ability to perform well in school, limit educational attainment, and reduce their ability or willingness to later participate in post-secondary education.

The two common methods for measuring the incidence of low income are Low Income Cut-offs (LICOs) and Market Basket Measure (MBM). LICOs are considered a relative approach and are based on family income data after government benefits and taxes. MBM is considered an absolute approach and assesses low income based on the cost of a specified basket of goods and services.

Using LICOs as a measure, the incidence of children (under 18) living in low-income circumstances in Alberta was 6.3% in 2007. Using the MBM, in 2007, about 9.0% of children could be considered low-income.[72]

In collaboration with Alberta Education, EAE has started looking at the high-school-to-post-secondary transition patterns and the post-secondary participation rate of learners from lower-income families.

Labour Market Shortages

Growth in Canada's working-age population has slowed by more than a third over the past 30 years and is projected to slow even more moving forward.[73] The year 2011 was the first in which baby boomers turned 65, signalling the beginning of a wave of retirements in coming years.

Though Alberta's population has been growing faster than that of other provinces and has the highest rate of in-migration, economic growth and low unemployment rates indicate that Alberta should expect to have labour shortages for the foreseeable future.

From 2011 to 2021, Alberta's labour market is projected to grow by approximately 607,000 workers at an average annual rate of 2.4%. A net 492,000 workers are expected to join the labour force, as supply increases at an annual rate of 1.9%. During the same period, Alberta could experience a labour shortage of about 114,000 workers;[74] over 62,000 (about 55%) of these are anticipated to require post-secondary education. Over 2011–21, EAE expects occupations related to the trades to have the greatest labour shortages, followed by health sciences and business.[75] In the past year, post-secondary institutions have been responsive in developing program content and delivery models to meet these needs. In 2011–12, the three education and training program bands that experienced the most significant growth in capacity through approved new programs and specialization were trades and technology, business and management, and health sciences. EAE is continuing to work closely with institutions, other ministries and key stakeholders to promote programming that furthers Alberta's priorities through a collaborative and integrated approach.

EAE produces Alberta's Occupational Supply Outlook Model (AOSOM), which forecasts labour market shortages for 129 occupational groups over 10 years. The educational component of the model forecasts the number of enrolments and graduates across 11 major fields of study for different levels of schooling. These forecasts are then translated into occupations where people are expected to look for employment. EAE bases its forecast of labour market shortages by program band on AOSOM. AOSOM distinguishes occupations requiring post-secondary education and compares the projected demand for people in each occupational category with the projected supply. National Occupational Codes are then aligned to Classification of Instructional Programs (CIP) codes to categorize occupational areas with anticipated shortfalls into program bands.

In 2011, Albertans with certificate and diploma credentials had the highest share of employment (34.9%), followed by those with university degrees (22.9%). It is anticipated that future labour market opportunities will be concentrated in occupations requiring certificate and diploma credentials or university degrees.

Employment by Educational Attainment, Alberta 2011

Level of education	Population employed	Share of employed
Less than high school	241,600	11.5%
High school graduate	487,800	23.3%
Some post-secondary	154,900	7.4%
Post-secondary certificate or diploma	730,600	34.9%
University degree	479,300	22.9%

Source: Statistics Canada. Labour Force Survey (custom tabulation).

The CAPR forecast is used to better align priority access areas with labour market demand, as most jobs created will require some form of post-secondary education. The projected surplus of graduates is based on the number of graduates Alberta's advanced learning system has the capacity to support over the forecast period.

Economy and Post-Secondary Education>>>

Comparing each program band's proportion of the anticipated labour market shortage with the system's enrolment mix helps explain the province's labour market shortages breakdown. For example, while 34.3% of labour market shortages are expected to occur in the Trades and Technology, a total of 9.3% of the post-secondary system's enrolment growth over 2011–21 is expected to occur in this program band.

At the program band level, most labour market shortages are forecasted for graduates from the Trades and Technology (34.3%); Health Sciences (19.6%); Business (19.5%); and Physical, Natural and Applied Sciences (14.3%) program bands. According to Alberta's projected enrolment by program band over 2011–21, the greatest shortages will be in the same areas. Based on what learners are choosing, most enrolment growth is expected to be concentrated in the Language Arts, Social Sciences, Arts and Humanities (24.6%) program band, followed by Physical, Natural and Applied Sciences (19.3%), and Health Sciences (16.6%)—even though a significant proportion of the labour market shortage in the Business program band is likely to be filled by graduates of Language Arts, Social Sciences, Arts and Humanities programs.

The post-secondary system must continue to respond to both learner and labour market demand. With anticipated labour market shortages, a collaborative and comprehensive approach to planning across Campus Alberta is necessary to meet learner, societal, and economic needs.

Labour Market Demand Forecast by Program Band, 2011-21

	Projected labour shortage 2011-21		Projected enrolment growth (FLE) 2011-21		Projected surplus / (shortfall)
Program band	#	% of Total	#	% of Total	
Trades and Technology	21,413	34.3%	986	9.3%	(20,426)
Health Sciences	12,222	19.6%	1,758	16.6%	(10,464)
Business	12,190	19.5%	1,332	12.6%	(10,857)
Physical, Natural and Applied Sciences	8,908	14.3%	2,048	19.3%	(6,861)
Languages, Social Sciences, Arts and Humanities	4,869	7.8%	2,603	24.6%	(2,266)
Education	1,328	2.1%	388	3.7%	(940)
Recreation	1,249	2.0%	217	2.1%	(1,031)
Legal and Security	212	0.3%	96	0.9%	(117)
Preparatory and Basic Upgrading	N/A	N/A	1,161	11.0%	N/A
All Programs	62,390	100.0%	10,590	100.0%	(52,962)

Notes: Rows may not total due to rounding.

Sources: Alberta Enterprise and Advanced Education - Occupational Supply Outlook Model, In-Jector Model.

Chapter Three

POST-SECONDARY EDUCATION

Overview >>>

High levels of educational attainment are linked to improved health outcomes, stronger communities, and the overall openness and vibrancy of a society. A post-secondary credential is replacing the high school diploma as the key to labour market entry. Alberta's level and composition of post-secondary enrolment is a defining factor in the ability to meet current and projected labour and skill shortages, create the economic foundations necessary for success, and ensure the province can maintain and enhance Albertans' quality of life.

CHAPTER HIGHLIGHTS:

- Alberta has a lower post-secondary participation rate than other provinces due to a number of factors, including our strong labour market and high rates of in-migration of educated people.
- Enrolment in Alberta's publicly funded advanced education system has steadily increased over the past 10 years, with an average annual increase of 2.52%. However, enrolment growth appears to be slowing down. Enrolment is expected to increase by 0.3% and 0.1% for 2011–12 and 2012–13.
- In 2010–11, a total of 37,968 learners graduated from parchment programs at Alberta's publicly funded institutions, an increase of 5.4% from the previous year.
- While Alberta has about 11% of Canada's labour force, it trains more than 20% of the country's apprentices.
- Alberta's private vocational training system offers over 700 licensed programs through 142 institutions and enrolled 11,945 students in 2010–11.
- In 2011–12, the Student Aid Alberta program issued over $650 million in federal and provincial student aid to 54,361 full-time students.
- Aboriginal enrolment at Alberta's publicly funded post-secondary institutions has been steadily increasing, and currently makes up about 3.7% of all enrolments.

KEY QUESTIONS:

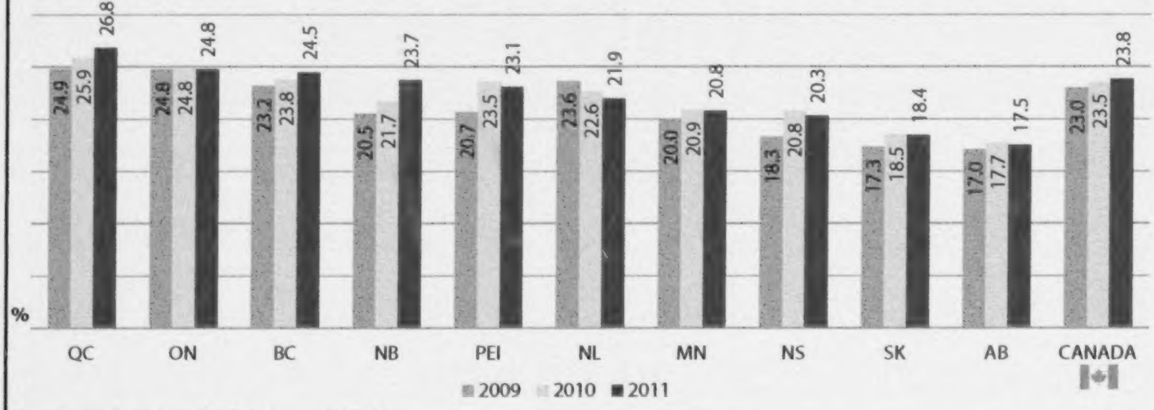
- What strategies can be used to increase the post-secondary participation rate in Alberta? How do economic factors impact participation rates, particularly when making pan-Canadian comparisons?
- How can we continue to increase Aboriginal and other under-represented groups' post-secondary participation rates?
- How can we measure the impact on the labour force of private vocational training, community adult learning councils, and other foundational learning?

Post-secondary Participation >>>

The post-secondary participation rate of Albertans aged 18–34 was 17.5% in 2011. This figure is consistent with previous years; the post-secondary participation rate has hovered in the range of 17% to 20% over the past decade. Across the rest of the country, rates ranged from highs of 26.8% in Quebec and 24.8% in Ontario, to 20.3% and 18.4% in Nova Scotia and Saskatchewan, respectively, in 2011. The Canadian average was 23.8%. In Quebec, British Columbia, and New Brunswick, the participation rate increased over the past three years, whereas in Newfoundland and Labrador it decreased. Post-secondary participation remained consistent in the other provinces.[76]

Alberta's comparatively low post-secondary participation rate is influenced by various factors, such as the availability of job opportunities,[77] the rate of population growth, and the capacity of the system to accommodate demand. Alberta's strong labour market is a key factor in the low participation rate among its 18–34 year old population. Another key factor is the province's status as a net gainer of migrants—both international and interprovincial—which increases our population base at a faster rate than our enrolment is increasing. The majority of interprovincial migrants come to Alberta to work and are already in possession of the skills and training they need to participate in Alberta's labour market. Since the post-secondary participation rate is calculated by dividing the number of 18- to 34-year-old students attending post-secondary education into the population base, a greater rate of population growth can effectively lower the post-secondary participation rate, even though enrolment levels are increasing.

Post-secondary Participation Rate (18-34 years) - Canada and Provinces



Source: Statistics Canada. Labour Force Survey (custom tabulation).

System Overview >>>

Alberta has an extensive and multifaceted adult learning environment, which plays a critical role in the Alberta economy, and which will be one of the principal mechanisms used to address many of the economic issues discussed in the previous chapter. In Alberta, training and educational opportunities are provided by Campus Alberta, an integrated and collaborative advanced education system of publicly funded post-secondary institutions, which is supported by Alberta Innovates, community adult learning providers, private educational institutions, and industry. Working together with these providers, the GOA takes steps that will provide long-term benefits to Alberta's society and economy, and address important system issues such as under-representation of specific groups (e.g., Aboriginal, rural, and disabled learners); participation and enrolment rates and patterns, as well as program completion rates; and affordability (e.g., providing appropriate levels of student financing).

Campus Alberta's 26 publicly funded post-secondary institutions are categorized into six sectors, each with corresponding roles and mandates.* These sectors are Comprehensive Academic and Research Institutions (CARIs), Baccalaureate and Applied Studies Institutions (BASIs), Polytechnical Institutions (PIs), Comprehensive Community Institutions (CCIs), Independent Academic Institutions (IAIs), and Specialized Arts and Culture Institutions (SACIs).

Institutional differentiation among sectors is based largely on credentials offered and type of research activity at the institution. It is also recognized that institutions differ within each sector according to program or field of study specializations, institutional strengths, strategic priorities, client groups served, or delivery models utilized. The six-sector model allows for greater responsiveness to community needs through regional stewardship, and ensures that Campus Alberta is able to achieve desired outcomes and effectively meet the diverse expectations of learners, society, the economy, and employers.

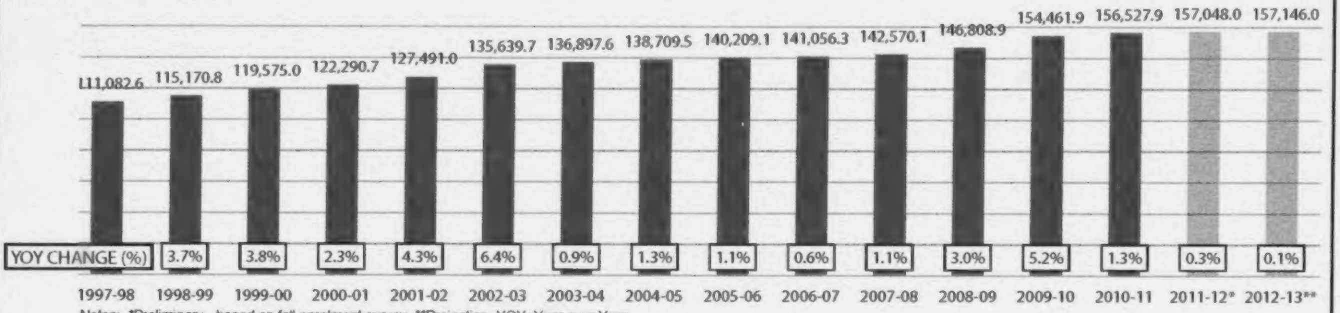
Enrolment Trends

Two different methods are used to report enrolment data: headcount enrolment and full-load equivalent (FLE) enrolment. Headcount enrolment counts the actual number of people in post-secondary education. The FLE measure looks at the course load students take. Generally, 1.0 FLE equals one full course load (some programs, such as apprenticeship, have different weights). For example, there may be 100 people enrolled in a program—the headcount enrolment—with an FLE enrolment of 65.5. In this case, some students must be enrolled part-time (i.e., not taking a full course load).

Enrolment in Alberta's post-secondary education system has increased over the years, with the reported FLE enrolment figures showing an average annual increase of 2.52% over the past 10 years. Headcount enrolments increased by an average of 1.93% annually from 2004–05 to 2010–11.

However, enrolment growth appears to be slowing down. In 2010–11 the FLE enrolment grew by 1.3%. Preliminary enrolment reports for the 2011–12 academic year and the projected enrolment for 2012–13 estimate annual system-level enrolment increases of 0.3% and 0.1%, respectively. Alberta's economic growth is likely one of the reasons for the moderation in enrolment growth.

Historical Enrolment (FLE), Alberta



Notes: *Preliminary - based on fall enrolment survey. **Projection. YOY=Year over Year
Source: Alberta Enterprise and Advanced Education - Learner and Enrolment Reporting System (LERS), Preliminary Enrolment Survey.

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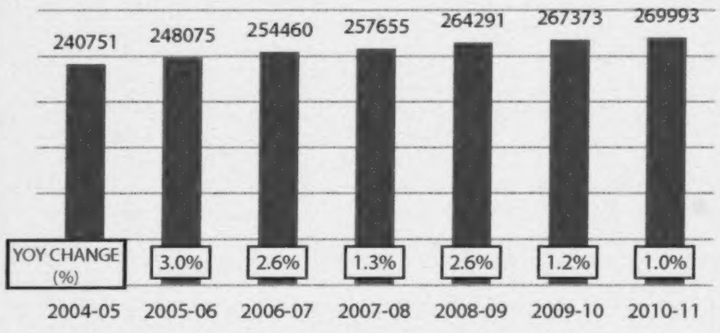
*For more information, see the Roles and Mandates Policy Framework for Alberta's Publicly Funded Advanced Education System, available online at http://eae.alberta.ca/post-secondary/policy/roles.aspx.

System Overview >>>

Historical Enrolment (Headcount), Alberta



Source: Alberta Enterprise and Advanced Education - Learner and Enrolment Reporting System (LERS), Preliminary Enrolment Survey.
Notes: YOY=Year over Year

Steady increases in FLE enrolment over the past several years suggest that Albertans view post-secondary education as increasingly important, and are enrolling in full-time training. Post-secondary institutions may continue to see increased demand in the future. In addition, the chart above appears to suggest that when Alberta's economy is booming (2004–08), enrolment increases are smaller than when the economy cools (2008–10). In other words, more Albertans pursue training at times when there are fewer employment opportunities available. This is an important fact for planning and anticipating demand for post-secondary seats.

While enrolment has increased at the system level, enrolment growth varies across programs, institutions, and regions. At the regional level, FLE enrolment growth in 2010–11 was highest in Lakeland region (7.2%), followed by Keyano region (4.6%), Calgary region (2.7%), and Northern Lakes region (2.7%). Grande Prairie region (-2.7%), Central region (-0.4%), and Lethbridge region (-0.1%) had a decrease in FLE enrolment in 2010–11. FLE enrolment in Portage region decreased by 9.9%, but the headcount increased by 20.5%, indicating that more learners undertook part-time study options. Variations across programs, institutions, and regions indicate the need for EAE to continue to work closely with institutions to encourage programming that meets the needs of the labour market and learners. With these regional differences, it may be important to focus resources in areas with greater growth in order to support system needs.

Most learners attending publicly funded post-secondary institutions in Alberta are between the ages of 18 and 34. This group is referred to as the prime post-secondary-attending cohort.

The regional service rate compares a service region's 18- to 34-year-old population with the number of 18- to 34-year-olds attending publicly funded post-secondary institutions within that region. This ratio indicates post-secondary participation at the regional level. In 2010–11, the Lakeland region had the highest regional service rate, at 36.3%. The Northern Lakes region had the lowest, at 5.9%.

Post-secondary Regional Service Rate, 18–34 Years

Geographic service region	2006–07	2007–08	2008–09	2009–10	2010–11
Calgary	19.0%	18.4%	18.6%	18.9%	19.1%
Central	10.9%	10.9%	10.9%	11.0%	10.8%
Edmonton	23.3%	22.9%	22.7%	22.9%	23.0%
Grande Prairie	4.7%	4.8%	4.7%	8.7%	8.5%
Keyano	9.1%	9.1%	8.8%	9.2%	9.1%
Lakeland	30.4%	34.7%	34.4%	34.0%	36.3%
Lethbridge	31.3%	30.5%	29.7%	30.8%	31.0%
Medicine Hat	13.8%	13.4%	12.8%	13.9%	14.1%
Northern Lakes	4.8%	5.4%	5.9%	5.8%	5.9%
Portage	9.7%	9.3%	10.2%	9.8%	10.9%

Notes: Students attending at multiple locations are counted at each location.
Athabasca University is not included in any particular service region. Data does not include the Banff Centre.
Data are restated annually due to updated historical population figures.
Sources: Alberta Treasury Board and Finance, Statistics Canada, Alberta Enterprise and Advanced Education.

Historical Enrolment by Service Region (FLE – Attending at)

Geographic service region	2006–07	2007–08	2008–09	2009–10	2010–11	Average annual increase
Calgary	48,567.9	48,708.7	50,977.9	54,073.8	55,537.3	3.1%
Central	5,223.3	5,215.2	5,285.9	5,629.0	5,609.0	1.2%
Edmonton	61,019.4	62,258.6	63,649.6	65,805.9	66,163.6	1.7%
Grande Prairie*	1,262.4	1,251.1	1,289.8	2,069.3	2,013.8	10.7%
Keyano	1,223.4	1,290.2	1,212.4	1,353.1	1,414.7	2.2%
Lakeland	1,778.2	1,928.0	2,051.1	2,098.8	2,249.8	3.2%
Lethbridge	10,675.0	10,606.7	10,503.9	11,034.4	11,022.1	0.2%
Medicine Hat	2,365.7	2,347.1	2,312.6	2,537.4	2,547.5	1.2%
Northern Lakes	777.9	860.4	1,020.2	1,059.6	1,088.1	5.2%
Portage	979.5	910.8	979.6	1,099.3	989.9	-1.1%
Athabasca University	7,183.7	7,193.3	7,525.9	7,701.3	7,892.1	3.2%
Alberta	**141,056.3**	**142,570.1**	**146,808.9**	**154,461.9**	**156,527.9**	**2.2%**

Note: *The significant jump in enrolment in the Grande Prairie region in 2009–10 may be largely attributed to Grande Prairie Regional College's assumption of program delivery at Fairview College, formerly delivered by NAIT. Enrolment reported by geographic service region are determined by institutions' home campus location. Includes the Banff Centre.

Source: Alberta Enterprise and Advanced Education, Learner and Enrolment Reporting System (LERS), Banff Centre – Enrolment Report.

Historical Enrolment by Service Region (Headcount – Attending At)

Geographic service region	2006–07	2007–08	2008–09	2009–10	2010–11	Average annual increase
Calgary	84,397	84,907	88,061	88,349	88,749	1.1%
Central	10,683	10,591	10,455	10,228	10,004	1.0%
Edmonton	92,583	93,590	95,946	97,041	97,727	1.6%
Grande Prairie*	2,229	2,298	2,249	3,965	3,800	13.6%
Keyano	2,446	2,537	2,658	2,866	2,932	4.1%
Lakeland	6,862	8,067	7,713	7,386	7,925	1.8%
Lethbridge	15,600	15,403	15,034	15,526	15,620	-0.4%
Medicine Hat	5,751	5,570	5,255	5,250	5,408	-1.0%
Northern Lakes	1,401	1,565	1,734	1,709	1,752	5.4%
Portage	2,808	2,773	3,062	2,974	3,585	5.1%
Athabasca University	37,219	37,876	38,543	38,333	38,937	2.7%
Alberta	**254,460**	**257,655**	**264,291**	**267,373**	**269,993**	**1.7%**

Note: *The significant jump in enrolment in the Grande Prairie region in 2009–10 may be largely attributed to Grande Prairie Regional College's assumption of program delivery at Fairview College. Programs were formerly delivered by NAIT. Enrolment reported by geographic service region are determined by institutions' home campus location. Includes the Banff Centre.

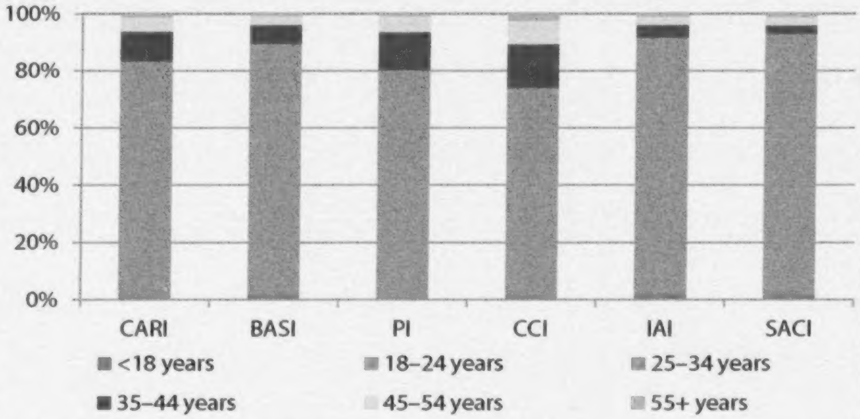
Source: Alberta Enterprise and Advanced Education, Learner and Enrolment Reporting System, Banff Centre – Enrolment Report.

System Overview >>>

Some differences in the distribution of enrolment by age group are evident across programs and sectors. For example, CCIs are more likely to serve mature learners than institutions in other sectors, while IAIs and SACIs are more likely to serve young adults aged 18–24.

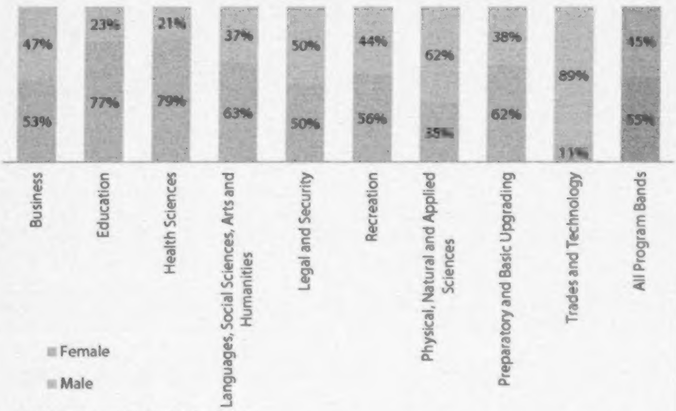
Enrolment in post-secondary education in Alberta included a higher proportion of females (55%) than males (45%). The proportion of females is higher in most program bands. Trades and Technology and Physical, Natural and Applied Sciences are the only program bands that had a higher proportion of males than females.

Enrolment (Headcount) by Age Group and Sector, 2010-11



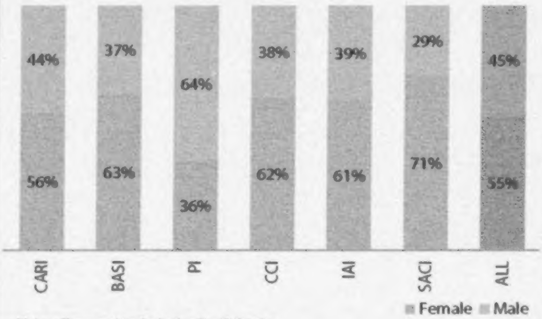
Notes: Does not include the Banff Centre.
CARI – Comprehensive Academic and Research Institutions, BASI – Baccalaureate and Applied Studies Institutions, PI – Polytechnical Institutions, CCI – Comprehensive Community Institutions, IAI – Independent Academic Institutions, SACI – Specialized Arts and Culture Institutions
Source: Alberta Enterprise and Advanced Education - Learner and Enrolment Reporting System (LERS).

Enrolment (FLE) by Gender and Program Band, 2010-11



Notes: Does not include the Banff Centre.
Source: Alberta Enterprise and Advanced Education - Learner and Enrolment Reporting System (LERS).

Enrolment (FLE) by Gender and Sector, 2010-11



Notes: Does not include the Banff Centre.
CARI – Comprehensive Academic and Research Institutions, BASI – Baccalaureate and Applied Studies Institutions, PI – Polytechnical Institutions, CCI – Comprehensive Community Institutions, IAI – Independent Academic Institutions, SACI – Specialized Arts and Culture Institutions
Source: Alberta Enterprise and Advanced Education - Learner and Enrolment Reporting System (LERS).

System Overview >>>

Program Completers

A program completer is an individual who has completed all necessary program requirements and is awarded a parchment (when offered by the program). Individual institutions determine whether students have completed program requirements for graduation. Students attending Alberta's post-secondary institutions may be enrolled in more than one program and may receive multiple parchments in the same academic year.

In 2010–11, 37,968 unique learners graduated from parchment programs at Alberta's publicly funded institutions, an increase of 5.4% over the previous year. The Health Sciences program band had the highest number of program completers (9,066), followed by Business (7,567) and Languages, Social Sciences, Arts and Humanities (6,773). The largest annual increases were in the Legal and Security program band (9.4%) and Health Sciences program band (8.7%).

Graduates of Alberta's post-secondary institutions are highly satisfied with their educational experience. Graduate Outcome Survey results of the class of 2007–08 showed that the vast majority of graduates were satisfied with the overall quality of their educational experience (91%) and with the quality of teaching in their program (89%). The large majority (87%) of graduates also indicated that they feel the financial investment in their post-secondary studies was worth the benefits gained.[78]

Unduplicated Graduates of Parchment Programs by Program Band and Credential, 2010–11

Program bands	Certificate and Post-Basic Certificate	Post-Degree Certificate	Applied and Bachelor's Degrees	Doctoral Degrees	Master's degrees	Diploma and Post-Basic Diploma	Post-Degree Diploma	All Credentials	% Change from 2009–10
Business	1,050	--	3,222	16	535	2,580	216	7,567	5.1%
Education	206	3	2,043	48	411	77	21	2,809	3.2%
Health Sciences	2,995	10	3,152	102	830	1,983	24	9,066	8.7%
Languages, Social Sciences, Arts and Humanities	581	--	4,054	95	484	1,583	2	6,773	1.7%
Legal and Security	359	--	366	--	18	473	--	1,216	9.4%
Physical, Natural and Applied Sciences	318	--	3,715	382	1,065	948	2	6,429	7.6%
Preparatory and Basic Upgrading	5	--	--	--	--	--	--	5	--
Recreation	51	--	481	16	50	123	--	716	0.8%
Trades and Technology	1,655	--	53	--	--	2,070	--	3,775	1.9%
All program bands	**7,213**	**13**	**16,745**	**659**	**3,389**	**9,829**	**265**	**37,968**	**5.4%**

Notes: Table does not include data from the Banff Centre. Some values above may not reconcile with future data queries due to ongoing work with Statistics Canada on Classification of Instructional Programs (CIP) codes. The sum of the rows will not equal the provincial total, as students may have received more than one parchment.

Source: Alberta Enterprise and Advanced Education, Learner and Enrolment Reporting System (LERS).

Apprenticeship >>>

Alberta's Apprenticeship and Industry Training System: Background

Apprenticeship is a form of post-secondary education where people earn as they learn skills in a particular trade. Approximately 80% of an apprentice's time is spent on the job under the guidance of a qualified tradesperson; the other 20% involves technical training. Technical training is offered at 11 of Alberta's Polytechnical Institutions and Comprehensive Community Institutions.

There are a variety of ways an apprentice can participate in technical training. Technical training is often delivered through "block release," where the apprentice spends a block of time (typically eight weeks per year) in the classroom. In some trades, technical training is offered in other formats, such as blended learning (combined online and laboratory learning), training delivered one day a week for several months, and on-site classes at the workplace. Some apprentices may obtain study materials or individual learning modules to learn at their own pace and challenge the industry exam.

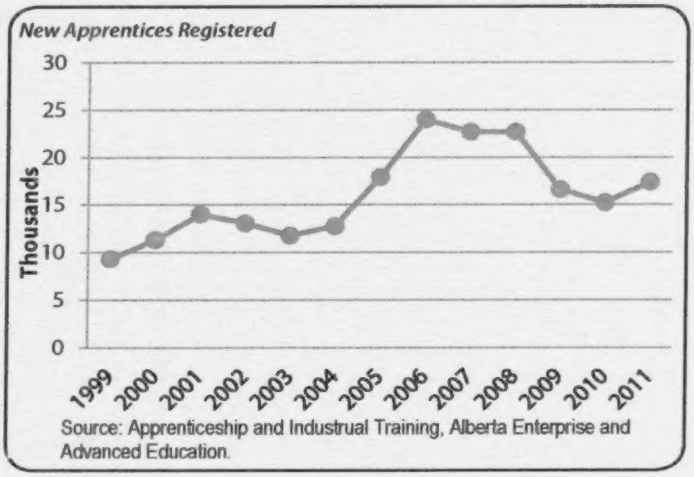
Industry establishes training and certification standards and provides direction to the system through an industry committee network and the Alberta Apprenticeship and Industry Training (AIT) Board. The GOA provides the legislative framework and administrative support for the system, and EAE acts as the registrar.

Because the system is industry-led, apprenticeship programs have consistent and standardized technical training course content across institutions. This allows apprentices to take different periods of technical training at different institutions.

A registered apprentice is a person participating in an apprenticeship program under a contract registered with EAE. While becoming an apprentice requires an employer, learners must also attend apprenticeship technical training to complete an apprenticeship program. Besides attending apprenticeship technical training, credit may also be granted for completing a number of recognized technology and technician programs, as well as pre-employment programs, provided through Campus Alberta and in other provinces.

While Alberta has about 11% of Canada's labour force, its employers hire and train more than 20% of the country's apprentices.[79] As of December 31, 2011, about 60,000 apprentices were registered in Alberta's apprenticeship and industry training system.[80]

In the six years prior to the heightened economic activity in Alberta and its high demand for tradespeople, between 9,000 and 14,000 new apprentices were registered by Apprenticeship and Industry Training annually. The number jumped to approximately 18,000 in 2005 and rose to approximately 23,000 by 2008.[81] In 2011, Alberta employers hired and registered more than 17,000 new apprentices.



Source: Apprenticeship and Industrual Training, Alberta Enterprise and Advanced Education.

Technical Training Seats

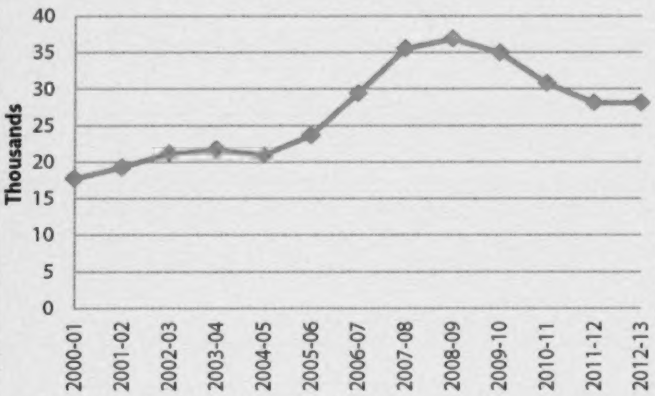
Apprenticeship technical training seats are scheduled at institutions according to:

- Number of registered apprentices eligible for training in each region, trade, and period
- Anticipated number of new apprentices
- Employer/apprentice preferences
- Availability of training facilities
- Current and historical class-fill rates
- Number of apprentices scheduled to attend current classes who will progress to the next level

When demand for technical training is high, funding is focused on apprenticeship seats. When demand drops, funding may be reallocated to investment in entry-level training and system enhancements such as online delivery. This flexibility allows apprenticeship technical training to address direct apprenticeship needs. It is normal for seats to be added during the year as required, as the apprenticeship and industry training system has a continuous intake and graduation system. The number of apprenticeship seats offered each year shows a strong correlation (Pearson's r=0.77) with the employment rate of the previous calendar year.

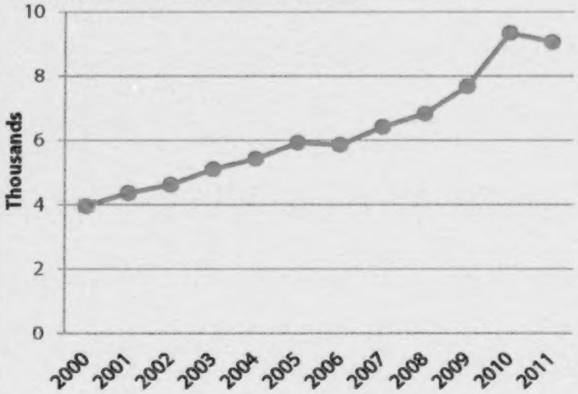
Apprenticeship >>>

Technical Training Seats Offered by School Year



Notes: Additional apprenticeship seats may be added in-year.
Source: Apprenticeship and Industry Training, Alberta Enterprise and Advanced Education.

Journeyperson Certificates Completed



Notes: Journeyperson certificate completions are by calendar year
Source: Apprenticeship and Industrual Training, Alberta Enterprise and Advanced Education.

With fewer new apprentices starting in 2009 and 2010 because of the economic downturn, fewer apprenticeship technical training seats were required.

In 2010–11, 78% of apprentices who completed the first year of their program (including on-the-job training and work experience, technical training, and industry exams) completed their apprenticeship program within two years of the earliest completion date.[32]

Technical Training Seats Offered by Service Region

Geographic service region	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13*
Calgary	10,651	11,312	10,635	8,728	7,844	7,787
Edmonton	14,493	15,080	14,724	13,542	12,346	12,388
Central	4,188	4,133	3,762	3,218	2,895	2,776
Grande Prairie	1,476	1,661	1,480	1,271	1,198	1,234
Lakeland	1,437	1,283	1,142	996	1,032	1,076
Lethbridge	1,315	1,269	1,137	949	876	904
Keyano	874	1,040	1,016	970	850	836
Medicine Hat	729	679	693	709	668	676
Northern Lakes	165	221	214	241	225	228
Portage	224	188	184	151	172	162
Total	35,552	36,866	34,987	30,775	28,106	28,067

Notes:
* Additional apprenticeship seats may be added in-year.
Figures do not include seats in bridging programs.
Regional allocation is determined at the institution level. Institutions are assigned as follows: Southern Alberta Institute of Technology to Calgary region, Northern Alberta Institute of Technology to Edmonton region, Red Deer College and Olds College to Central region, Grande Prairie Regional College to Grande Prairie region, Lakeland College to Lakeland region, Keyano College to Keyano region, Medicine Hat College to Medicine Hat region, Northern Lakes College to Northern Lakes region and Portage College to Portage region.
Figures do not include Delmar College, Marvel College, the Eveline Charles Academy, or other private training providers.
Source: Apprenticeship and Industry Training, Alberta Enterprise and Advanced Education.

Apprenticeship >>>

Trade Futures

Concerns about an aging population extend to skilled tradespeople. As Alberta's overall population ages, the supply of skilled tradespeople will be under increasing pressure. The median age in the skilled trades is steadily increasing, with many retirements expected over the next decade. Even with steady increases in the number of apprentices completing programs, a shortage of workers in certain trades is anticipated within and outside the province.[83,84,85]

As the economy grows, industry will need "work-ready" people and apprenticeship technical training seats for more apprentices.

To meet future demand during strong economic periods, as well as to address the province's aging population, EAE changed the journeyperson-to-apprentice ratio in 2011. All trades now have a ratio of one journeyperson supervising two or more apprentices. This allows more apprentices to be trained by Alberta industry, which in turn will positively impact the future number of skilled tradespeople in the province: for every dollar spent by employers to train an apprentice, they can on average expect a benefit of $1.47 or a net return of $0.47.[86]

Other initiatives are looking into broadening the recognition of trade credentials from countries like the United States, the United Kingdom, and Ireland.

To encourage more people to pursue a career in the trades, the GOA and the Alberta Apprenticeship and Industry Training Board are working with industry and organizations to encourage awareness, participation, and success in the trades, and to support Alberta youth in pursuing skilled trades and technology careers.

Foundational Learning >>>

The *Roles and Mandates Policy Framework* identifies two system outcomes—vibrant learning com-munities and strong learning foundations—that require a strong community-based adult learning system that operates in alignment with post-secondary institutions.[37] Foundational learning refers to the full array of learning required to bring individuals up to the equivalent of a high school graduate. It includes literacy, English as a Second Language (ESL), academic upgrading and preparations, high school equivalency, skills development, and employment preparation.

Foundational learning is a required programming area of Community Adult Learning Councils, with funding also provided to community adult literacy and family literacy organizations. Many post-secondary institutions also provide a level of foundational learning, usually adult basic upgrading, high school equivalency, and skills development.

Community Adult Learning

EAE's Community Adult Learning Program provides funding and other supports to 125 community-based organizations so they can offer a variety of part-time, non-credit adult learning opportunities in Alberta communities. These organizations are the primary providers of basic literacy and English language learning opportunities in rural Alberta.

Funded organizations receive a mix of three grants from EAE, each with a different focus:

The **Community Adult Learning Council (CALC) grant** supports 81 organizations in offering foundational and transitional programming, such as Adult Basic Literacy, English or French language learning, and Employability Enhancement (e.g., first aid, General Equivalency Diploma). It also supports the delivery of programming designed to address local community needs, such as crime prevention, farm succession, and parenting workshops. In 2010, 94,320 individuals participated in one of these opportunities, with another 16,178 participating in general interest opportunities, such as a community kitchen or social dance.

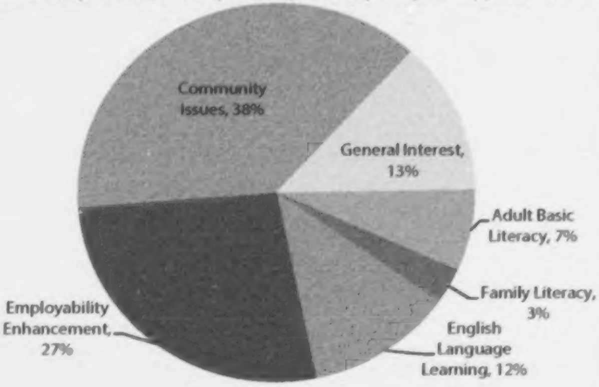
These learning opportunities provide adults who may have been out of a learning environment for some time with a safe re-entry to learning, and create opportunities to provide information about other learning opportunities in their communities. General interest programs are also opportunities for organizations to generate revenue in order to support foundational learning opportunities for learners facing financial barriers.

The **Volunteer Tutor Adult Literacy Services (VTALS) grant** supports 71 organizations that offer basic instruction to adults wanting part-time, individual, small group, or classroom instruction to improve their literacy, numeracy, or language skills. Half of program participants are immigrant Albertans. These learners bring years of formal schooling to the province, and community learning opportunities are an important springboard to their future employment and education. In fact, of those learners indicating previous educational experience outside of Canada, 71% had 10 or more years of formal education, compared to 55% for Canadian-educated learners.[38] In 2010, 3,047 individuals participated in learning through a VTALS-funded program.

The **Family Literacy Initiative Fund (FLIF) grant** supports 55 organizations that offer family literacy programming to economically and socially disadvantaged families. This programming aims to boost the confidence and literacy skills of parents so they can effectively engage their preschool children in early language and learning activities. In 2009–10, 3,737 parents/caregivers participated in learning through a FLIF-funded program.

The Community Adult Learning Program has experienced strong year-over-year growth in English language programming over the past four years, with 14,148 learners participating in ESL tutoring or classroom-based instruction in 2010, an increase of 165% since 2007.

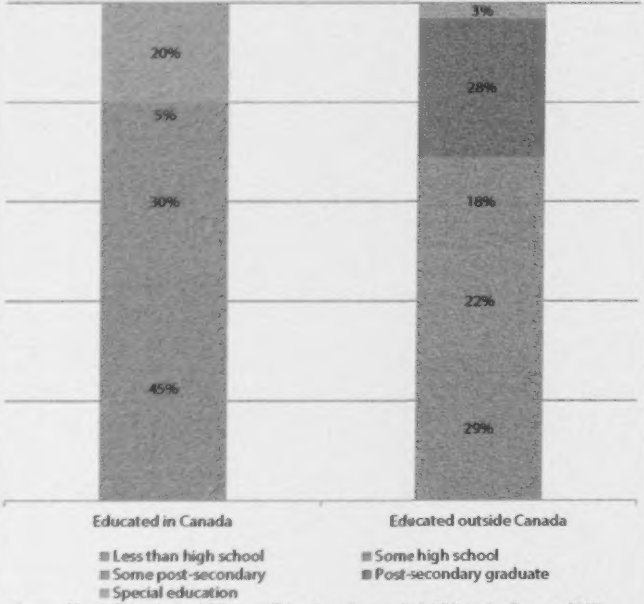
Community Adult Learning Participation by Program Type, 2010



Note: French Language Learning comprises less than 1% of total participation and is not included in the above chart.
Source: Alberta Enterprise and Advanced Education - Community Adult Learning Program *2010 Report to Partners*.

Foundational Learning >>>

Educational Background of Learners in VTALS Grant Funded Programs, 2010



Source: Alberta Enterprise and Advanced Education - Community Adult Learning Program 2010 *Report to Partners*.

Workplace Essential Skills

Alberta's post-secondary institutions also play a key role in community education and foundational learning. Comprehensive Community Institutions (CCIs) continue to partner and collaborate with local communities and community adult learning providers through their regional stewardship role in order to increase access to a range of learning opportunities. In addition, many institutions have satellite campuses and learning centres in several communities to provide expanded access in response to regional needs.

Within the post-secondary system, most learners access foundational programs through CCIs. In 2010–11, 79.1% of ESL enrolments (headcount), 61.2% of Academic Upgrading, and 100% of Transitional Vocational, Adult Basic Education and Employment Skills enrolments were in the CCI sector. A total of 16.2% of Academic Upgrading enrolments were in the Polytechnical Institutions sector, and 23.0% of Academic Upgrading and 22.0% of ESL enrolments were in the Baccalaureate and Applied Studies Institution sector. A small percentage of academic upgrading enrolments were in the Independent Academic Institution sector, at about 0.5% of total academic upgrading enrolments.

Most learners enrolled in foundational programs in 2010–11 were aged 18–34 (75.3%). With the exception of Transitional Vocational programs, which are almost entirely composed of full-time enrolments (headcount), foundational programs are almost evenly divided between part-time and full-time learners.

Enrolments for Academic Upgrading programs and ESL foundational learning programs showed marginal decline in 2010–11 after strong growth in the past three years. Headcount enrolment in Academic Upgrading programs was 3.9% lower and headcount enrolment in ESL programs was 6.6% lower compared to 2009–10. A favourable labour market created by the economic recovery might be the reason for the decline in enrolments.

Collaboration between CCIs and community adult learning is an important component of foundational learning in Alberta. Further analysis of the extent of collaboration and of student transitions between foundational learning and CCIs (and potentially other post-secondary institutions) may benefit the adult learning system and the government.

Alberta's foundational learning network gives individuals an opportunity (often through post-secondary studies) to acquire the skills necessary to develop to their full potential. The opportunity to acquire and develop skills through foundational learning is vital given the vast number of individuals who bypass further post-secondary and transition directly to the labour market, and because of the large proportion of Albertans who perform below minimum literacy standards. Moreover, the foundational learning network promotes lifelong learning which has a number of benefits both for the individual and for Alberta's society and economy.

Private Vocational Training >>>

Alberta's private vocational training system consists of 142 institutions and offers over 700 licensed programs. In 2010–11, 11,945 students were enrolled in the private vocational training system. While this represents a 6.2% increase over the previous year, the rate of increase is lower than in the previous two years. The lower rate may be due to people returning to work as a result of the economic recovery.

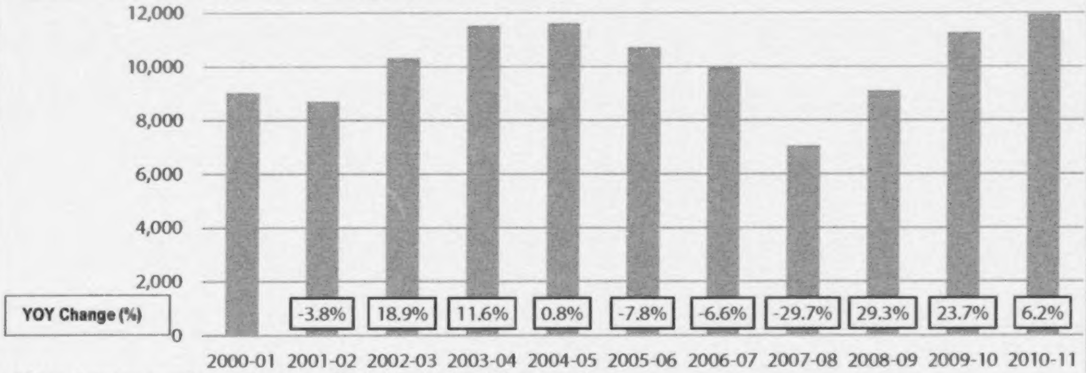
Private vocational training institutions provide focused occupational training in fields with viable employment opportunities. Licensed programs are offered in a wide variety of fields, such as acupuncture, emergency medical services, massage therapy, business administration, esthetics, and multimedia.

EAE licenses and monitors vocational training programs offered by private institutions in accordance with the *Private Vocational Training Act* and Regulation. This legislation allows private institutions to participate in Alberta's post-secondary education system and provides consumer protection to students enrolled in licensed programs.

As part of the application and licensing process, vocational training providers are required to demonstrate that industry supports the existence of labour market demand for graduates, as well as the relevance of the curriculum, appropriateness of admission requirements and suitability of instructor qualifications. If a professional body regulates the field, its requirements must be met before applying for a licence. To maintain a licence, institutions offering licensed programs must comply with the *Private Vocational Training Act* and Regulation.

In terms of performance outcomes, all private vocational institutions report their graduation rates (the percentage of students who graduated from a program, compared to the number who were expected to graduate during the reporting period) and job-placement rates (the percentage of job-seeking graduates who found related employment during the reporting period) to EAE annually. In 2010–11, the overall graduation rate for learners from private vocational training institution was 78%, and their job-placement rate was 89%.

Enrolment in Private Vocational Training Institutions (Headcount)



Notes: Data are based on the fiscal year (April - March). YOY=Year over Year

Source: Alberta Enterprise and Advanced Education - Private Vocational Training Branch

Student Aid Alberta >>>

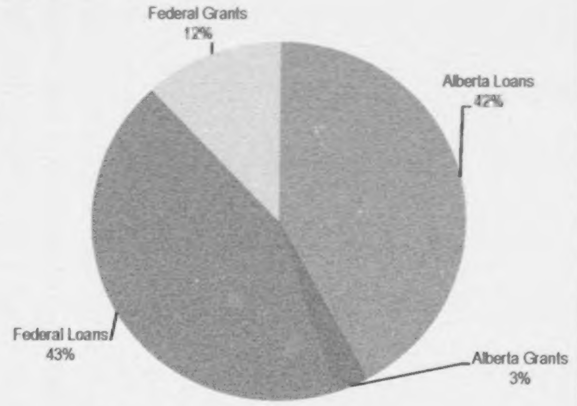
The Student Aid Alberta program issues loans and grants to students demonstrating financial need. Government student aid covers the basic costs of education, including tuition, fees, books, supplies, and basic living costs. When students apply to Student Aid Alberta, they are automatically considered for loans and grants from both the provincial and federal governments. Student loans are interest-free, and students are not required to make payments while in school and for six months after leaving studies. Grants are available for eligible students with high financial need or special circumstances. Grants usually do not have to be repaid unless students withdraw from studies or their eligibility changes.

In 2011–12, 54,361 full-time students were issued over $650 million in federal and provincial student aid at an average of $11,987 per funded student. For single students classified as "dependent" (approximately 32% of student aid recipients), parental income and contributions are considered. About 68% of student aid recipients have independent, married, or single-parent status. For these, parental income is not considered, and parental contributions are not required.

Most student financial assistance recipients are female—60.4% in 2011–12. Most student aid recipients are single (81.1%), with 11.9% of recipients married and 7.0% single parents in 2011–12.

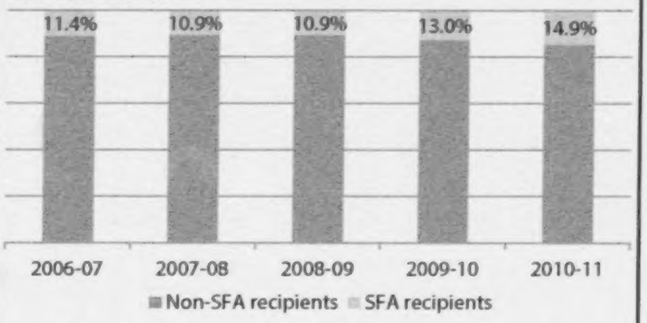
A total of 23,932 student aid recipients received a Low-Income Federal Grant, and 10,472 received a Middle-Income Federal Grant in 2011–12.[39]

Funding Source, 2011-12



Source: Alberta Enterprise and Advanced Education - Student Finance.

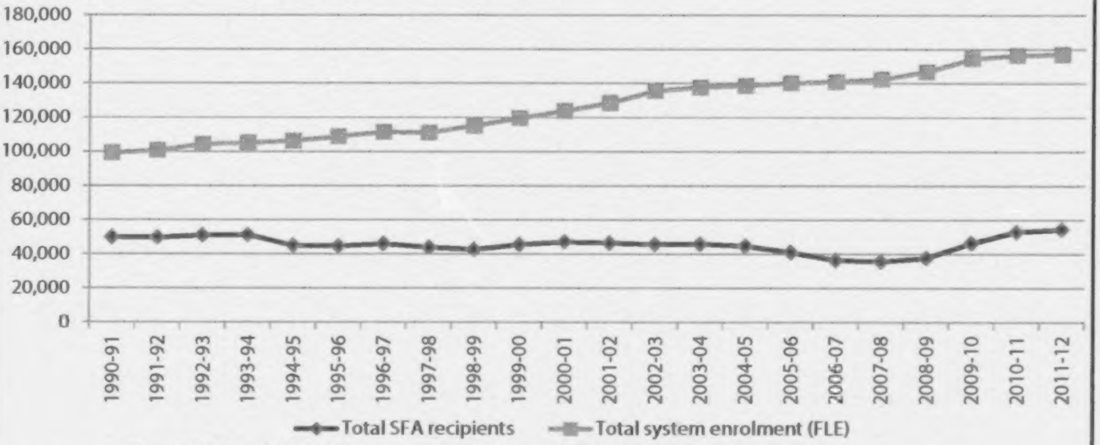
Proportion of Student Financial Assistance (SFA) Recipients out of Total Headcount



Note: *SFA recipients* include only students from publicly funded institutions in Alberta

Source: Alberta Enterprise and Advanced Education - Learner and Enrolment Reporting System (LERS) and Student Finance.

Student Financial Assistance (SFA) Recipients and Enrolment



Notes: *Total SFA recipients* include international students who are not residents of Alberta.

Source: Alberta Enterprise and Advanced Education - Learner and Enrolment Reporting System (LERS) and Student Finance.

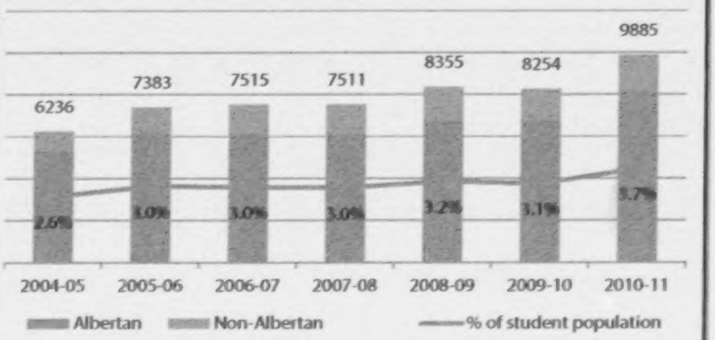
Aboriginal Learners >>>

The number of Aboriginal students enrolled in Alberta's publicly funded post-secondary institutions has increased from 6,236 in 2004–05 (the first year of data collection) to 9,885 in 2010–11. The number of Aboriginal students as a proportion of total enrolment has also increased from 2004–05 (2.6%) to 2010–11 (3.7%).

Figures relating to Aboriginal Albertans in post-secondary education are sourced from students self-declaring their Aboriginal status at the time of application. Individual students have the option to self-declare their status when applying for a post-secondary program one year and not self-declare their status when applying for another post-secondary program in another year or institution. Additionally, Aboriginal status does not automatically travel with an individual between the K–12 and post-secondary systems, or within the post-secondary system. Due to this reliance on self-identification and a lack of available data on students attending Aboriginal Colleges, the number of Aboriginal learners attending post-secondary education is likely understated.

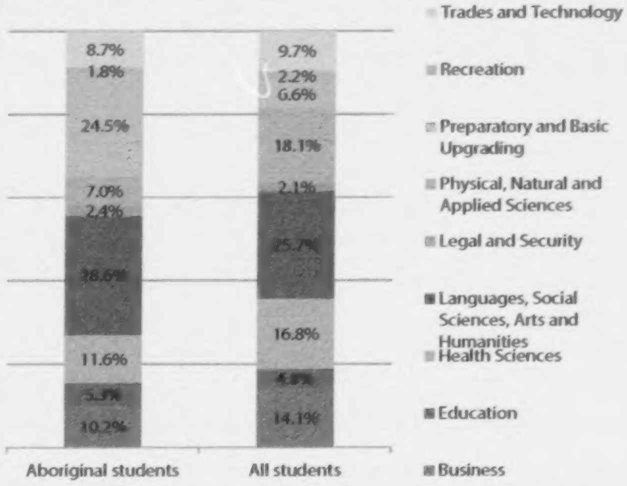
Most Aboriginal learners are enrolled in Languages, Social Sciences, Arts and Humanities (28.6%), Preparatory and Basic Upgrading (24.5%), Health Sciences (11.6%) or Business (10.2%). Consistent with the strong enrolment in Preparatory and Basic Upgrading programs, most Aboriginal learners are enrolled in programs where a parchment is not awarded (31.3%). These include programs like open studies, upgrading, employability, and job readiness.

Aboriginal Post-secondary Enrolment (Headcounts)



Note: Aboriginal students self-identify on post-secondary application forms. Data may underseltmate Aboriginal enrolments. Data do not include the Banff Centre, as they do not report via LERS.
Source: Alberta Enterprise and Advanced Education - Learner and Enrolment Reporting System (LERS).

Aboriginal Enrolment by Program Band (FLE), 2010-11

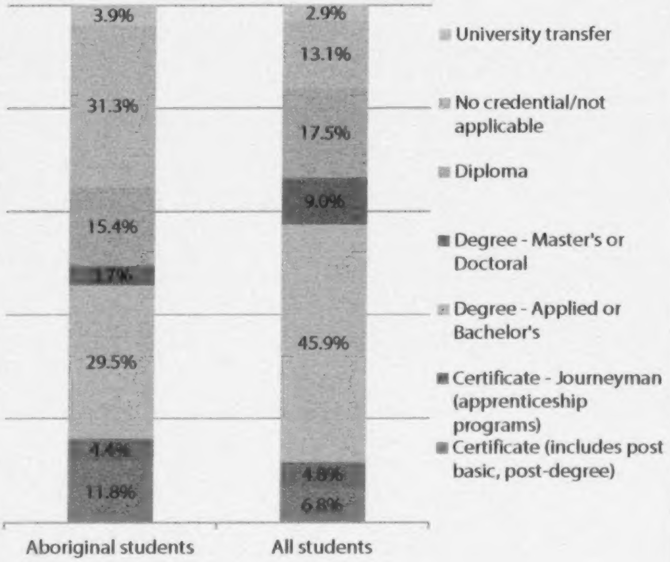


Notes: Does not include the Banff Centre. Percentages may not total 100% due to rounding.
Source: Alberta Enterprise and Advanced Educaiton - Learner and Enrolment Reporting System (LERS).

Aboriginal Learners >>>

As these numbers indicate, skills development training is a critical need among the Aboriginal population. However, they also stress the importance of continuing to develop strategies that increase the capacity of Aboriginal individuals to progress through preparatory programming into credentialed programming that leads to greater economic and social well-being. Currently, a large proportion of the Aboriginal learner population engages only in basic training, and forgoes opportunities to take part in further post-secondary opportunities. While this basic training can aid in immediate entry into the labour market, it can also prepare Aboriginal individuals for further post-secondary studies. Strategies that better articulate learner pathways that promote transitions from preparatory training onto credentialed programs will facilitate increased post-secondary learning in a population that is greatly under-represented in many occupational roles within the province.

Aboriginal Enrolment by Credential (FLE), 2010-11



Notes: Does not include the Banff Centre.
Percentages may not total 100% due to rounding.
Source: Alberta Enterprise and Advanced Educaiton - Learner and Enrolment Reporting System (LERS)

Students with Disabilities >>>

A key policy direction outlined in *A Learning Alberta*, the *Roles and Mandates Policy Framework*, and previous versions of this document is to increase access for groups traditionally under-represented in post-secondary education, including individuals with disabilities.[91]

Enrolment Pressures

In Alberta, children or students with special education needs are assessed and coded according to Alberta Education Special Education Coding Criteria. In the 2010–11 academic year, 77,924 students attending Early Childhood Services to Grade 12 were identified as having special education needs. This included 53,745 students who were coded as having a mild or moderate disability or as gifted and talented, 23,694 students who were coded as having a severe disability, and 485 students with more than one special education code.[92]

From 2007–08 to 2010–11, the number of students with disabilities seeking services and accommodations at post-secondary institutions increased by 41.9%, from 6,890 to 9,778. Students with disabilities represented about 3.6% of all headcount enrolments in the 2010–11 academic year.

The number of students seeking and receiving funding supports has also increased substantially over the last couple of years. In the 2009–10 academic year, 1,260 learners received disability funding from Learner Assistance through the Disability Studies Grant—up from 862 in 2007–08 (an increase of 46%). Of these 1,260, a total of 820 students also received funding for services and equipment.

Improving Data and Information

In 2008, EAE collaborated with Post-secondary Providers of Services to Students with Disabilities (PSPSSD) to develop improved data collection and reporting processes to better track disability services data. Using 2007–08 as the base academic year, 6,890 students across the province received support services from institutions' Offices for Students with Disabilities (OSD). Almost 41% of all students supported by OSD in 2007–08 had learning disabilities. This may be because learning disabilities are being identified more often in the K–12 system. A total of 1,556 students (28%) served by OSD received supports for multiple disabilities.

Chapter Four

STUDENT FLOWS

Overview >>>

Student mobility is an important consideration when forecasting and planning for anticipated post-secondary demand. Students entering the province to study—particularly international students—make up large portions of Alberta's in-demand program areas. Understanding the movement of Albertan students between the K–12 and post-secondary systems and within the post-secondary system helps align demand and capacity. Knowing why and how learners move between programs and institutions helps planners and policy makers increase access to learning opportunities by removing barriers to entry and completion.

CHAPTER HIGHLIGHTS:

- Albertans tend to delay transitioning from high school to post-secondary education. About 38.2% of Alberta high school students transition to post-secondary directly (within four years of entering Grade 10), with 58.4% doing so within six years of entering Grade 10.
- Most Albertans attend post-secondary education near where they graduated from high school.
- The ability to move between institutions and programs continues to be important in ensuring access. In fall 2010, 12,328 students who had previously attended another institution in the province were admitted to post-secondary institutions in Alberta.
- Immigrants to Alberta continue to face challenges in entering the job market and obtaining employment commensurate with their skills.
- Two years after graduation, the majority of graduates from Alberta's publicly funded post-secondary institutions have stayed in the province.
- Alberta attracts the fourth-highest number of international students among the provinces. Competition for international students is increasing, requiring greater strategic alignment with national and provincial goals.
- Alberta is expected to continue to rely on international students for a significant proportion of enrolment in graduate degree programs.

KEY QUESTIONS:

- How can Alberta's post-secondary system help to address the skilled worker shortage going forward? How can we also leverage and attract in-migration and immigration to fill the gap?
- How can we ensure alignment of post-secondary enrolment growth with the needs of the labour market? Are there incentives for learners and institutions that could encourage this?
- How can industry be engaged to help address the shortages?

High School Transitions>>>

High School Transition Rate by Service Region

Geographic service region	Four-year		Six-year	
	2009–10	2010–11	2009–10	2010–11
Calgary	40.8%	40.9%	61.9%	61.1%
Central	33.4%	34.1%	55.4%	55.2%
Edmonton	37.7%	38.3%	60.6%	59.3%
Grande Prairie	32.7%	34.1%	51.2%	49.4%
Keyano	29.9%	34.6%	53.5%	50.2%
Lakeland	41.5%	46.4%	63.9%	65.6%
Lethbridge	41.2%	39.0%	61.0%	58.8%
Medicine Hat	38.6%	39.7%	60.1%	60.5%
Northern Lakes	28.9%	25.0%	44.7%	44.4%
Portage	33.4%	35.8%	58.6%	57.2%
Alberta	37.8%	38.2%	59.3%	58.4%

Notes: Results include all public, separate, charter, francophone, and private schools in Alberta with a high school program. Historical results may have been restated using current mapping.

Source: Alberta Education.

High School Student Transitions, Fall 2011 – Summary Table

Geographic service region	Number of high school graduates	ATTENDING		
		In region	Other Alberta	*Not attending in Alberta
Calgary	10,057	33.6%	6.4%	60.0%
Central	2,726	17.9%	16.9%	65.2%
Edmonton	12,113	31.0%	6.8%	62.2%
Grande Prairie	1,079	16.0%	14.0%	70.0%
Keyano	466	19.3%	13.9%	66.7%
Lakeland	420	12.4%	28.3%	59.3%
Lethbridge	1,453	27.6%	9.2%	63.2%
Medicine Hat	946	22.1%	16.2%	61.7%
Northern Lakes	652	1.8%	20.2%	77.9%
Portage	660	6.1%	26.4%	67.6%
Alberta TOTAL	30,572	28.1%	9.4%	62.5%

Notes:
*Figures include high school graduates not attending a publicly funded post-secondary institution in Alberta. May include students attending post-secondary education out-of-province.

Data includes only those high school students who transition directly to post-secondary education upon graduation. The number of high school graduates attending post-secondary education may be understated, as these only represent a snapshot of fall enrolments and may not include those graduates entering apprenticeship programs or those with a continuous intake. Percentages may not total 100 due to rounding.

Source: Alberta Enterprise and Advanced Education, Applicant Submission Initiative (ASI), Alberta Education.

High School Transitions

How and when students transition from high school to post-secondary education plays an important role in addressing social and economic objectives and outcomes, including taking action on skill shortages in the labour market.

As the time from high school entry increases, so does the proportion of learners who transition to post-secondary education. In 2010–11, about 38.2% of Alberta high school students transitioned to post-secondary directly (within four years of entering Grade 10). In the same reporting year, 58.4% of Alberta high school students transitioned to post-secondary within six years of entering Grade 10. This number varied regionally, from a high of 65.6% in the Lakeland region to a low of 44.4% in the Northern Lakes region.

Improving transition rates between high school and post-secondary education will increase educational attainment levels and contribute to quality-of-life improvements at the individual, family, and societal levels. With our population aging, improving the educational outcomes of those who do not transition from high school would help address skill shortages.

High School Graduate Mobility

The Alberta Student Number (ASN) is the single, unique identifier for all Alberta learners. Every student in Alberta is assigned an ASN in either the K–12 or post-secondary system. Non-Albertan Canadian students and international students who move to Alberta to study are also assigned an ASN upon entering the system. Once learners are assigned an ASN, it stays with them for the course of their learning.

Using the ASN, it is possible to track students as they leave Alberta high schools and move on to or transfer between post-secondary institutions.

In fall 2011, 28.1% of high school students who graduated in June of the same year attended post-secondary education within the region of their high school graduation, with 9.4% moving to another region within the province. Graduates from the Calgary (33.6%) and Edmonton (31.0%) regions were most likely to remain in their home region, while those from the Portage (6.1%) and Northern Lakes (1.8%) regions were least likely.

Ensuring that students can easily move into and through post-secondary education is an important part of an accessible system. Mechanisms that facilitate system mobility help students transfer between institutions, programs, or credentials, reduce barriers to educational

Learner Mobility >>>

achievement, and get students into the labour market faster. It is important that students begin their post-secondary experience at a place that is appropriate for their individual skills and experiences, and receive appropriate recognition of and credit for prior learning and credentials.

Recognizing Prior Learning

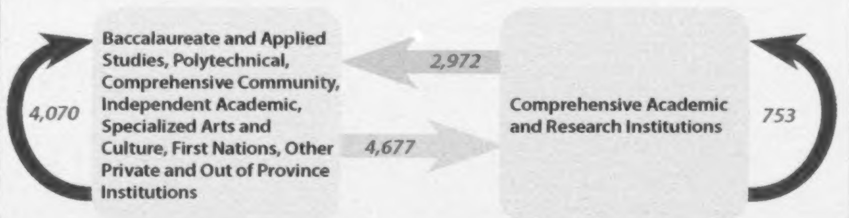
Recognition of Prior Learning uses three types of assessment process to evaluate acquired knowledge, skills, and attitudes. These processes are transfer credit, credential recognition, and Prior Learning Assessment and Recognition (PLAR).

Transfer Credit

Transfer is the movement of students among post-secondary institutions based on transferable credit. Transfer credit is awarded for successful completion of structured educational activities at a post-secondary institution.

In fall 2011, 12,472 students who had previously attended another institution in the province were admitted to a post-secondary institution in Alberta. In addition, 6,989 students transferred into an Alberta institution. The Baccalaureate and Applied Studies

Alberta Student Mobility by Sector, 2011


4,070
Baccalaureate and Applied Studies, Polytechnical, Comprehensive Community, Independent Academic, Specialized Arts and Culture, First Nations, Other Private and Out of Province Institutions
2,972
4,677
Comprehensive Academic and Research Institutions
753

Student Transfer Patterns – Alberta, 2011

TRANSFERRING TO	TRANSFERRING FROM								
	Comprehensive Academic and Research	Baccalaureate and Applied Studies	Comprehensive Community	Polytechnical	Independent Academic	Specialized Arts and Culture	Aboriginal Colleges	Other Private Institutions	TOTAL
Comprehensive Academic and Research	753 (6.2%)	1,966 (16.2%)	1,821 (15.0%)	619 (5.1%)	174 (1.4%)	18 (0.1%)	20 (0.2%)	12 (0.1%)	5,383 (44.4%)
Baccalaureate and Applied Studies	1,676 (13.8%)	92 (0.8%)	577 (4.8%)	534 (4.4%)	219 (1.8%)	16 (0.1%)	8	14 (0.1%)	2,409 (19.9%)
Comprehensive Community	432 (3.6%)	256 (2.1%)	460 (3.8%)	229 (1.9%)	43 (0.4%)	14 (0.1%)	26 (0.2%)	9 (0.1%)	1,469 (12.1%)
Polytechnical	729 (6.0%)	615 (5.1%)	321 (2.6%)	54 (0.4%)	51 (0.4%)	29 (0.2%)	—	16 (0.1%)	1,816 (15.0%)
Independent Academic	99 (0.8%)	74 (0.6%)	30 (0.2%)	20 (0.2%)	15 (0.1%)	—	—	—	242 (2.0%)
Specialized Arts and Culture	23 (0.2%)	13 (0.1%)	8 (0.1%)	6 (0.0%)	—	—	—	—	50 (0.4%)
Aboriginal Colleges	9 (0.1%)	—	16 (0.1%)	5 (0.0%)	—	—	—	—	31 (0.3%)
Other Private Institutions	—	5	0 (0.0%)	—	—	—	—	—	17 (0.1%)
TOTAL	3,715 (30.7%)	3,018 (24.9%)	3,233 (26.7%)	1,463 (12.1%)	505 (4.2%)	77 (0.6%)	53 (0.4%)	56 (0.5%)	12,120 (100.0%)

Notes: Values less than five have been supressed and indicated by (—).

Percentages represent the proportion of total transfer and may not total 100% due to rounding.

Aboriginal Colleges include Blue Quills First Nations College and Yellowhead Tribal College.

Other Private Institutions include Rocky Mountain College and Prairie Bible College.

Source: Alberta Enterprise and Advanced Education, Alberta Council on Admissions and Transfer (ACAT). 2011 Transfer Patterns Report.

Learner Mobility >>>

Institutions sector (BASI) showed the largest year-to-year increase in the receipt of transfer students, at 27% compared to fall 2010. The Comprehensive Academic and Research Institution (CARI) sector was the top sending sector in fall 2011.[93]

The Alberta Council on Admissions and Transfer (ACAT) is the provincial body responsible for overseeing the Alberta Transfer System. The ACAT secretariat also maintains the provincial database of transfer agreements that exist between Alberta Transfer System members, and facilitates working relationships among stakeholders to support a strong, student-centred transfer system. According to the Alberta Graduate Outcomes Survey, Class of 2009-10, the vast majority of Alberta's post-secondary graduates (90%) were satisfied with the transfer credit they received.

Credential Recognition

Immigrants to Alberta accounted for 20.0% of the province's working-age population in 2011 (the third-highest percentage among the provinces).[94] Ensuring that new Albertans can use their skills and experience to their utmost advantage is vital for the economic and social prosperity of the province.

Working toward this goal, Alberta's International Qualifications Assessment Service (IQAS)[95] compares educational qualifications obtained in other countries to those in Alberta in order to help people with employment, professional licensure, or further education.

While IQAS's services are mainly used by immigrant Albertans, they can be used by anyone with foreign educational qualifications, including Albertans who have studied abroad. Foreign credential recognition can be the key to landing employment in one's field of study, obtaining employment commensurate with one's skills and level of education, and entering a post-secondary program without having to take prerequisite courses that duplicate previously acquired knowledge.

Biennially, IQAS measures client satisfaction and resulting educational and labour market outcomes from the credential assessment process. Survey data demonstrates that about 62% of IQAS clients seek an assessment primarily to pursue further education, 46% for employment, and 23% to obtain professional licensure. About 37% of IQAS clients reported applying for further education because a Canadian credential was more useful in finding a job or because their current qualifications were not recognized in Canada (14%).[96]

Survey results demonstrate that many IQAS clients who had jobs in their home country that required post-secondary education were unable to find a job in Canada that also required post-secondary education. Only 42% of foreign university-educated and 45% of foreign college-educated clients found similar employment in Canada. The top challenges cited by IQAS clients in either finding employment or pursuing further education were not having their work experience in their home country recognized (63%), not having the education received in their home country recognized (62%), financial barriers (57%), and being unable to meet professional licensing requirements (52%).[97]

Increased awareness of the supports available to immigrant Albertans could help them with employment and education and reduce the time in-province before seeking an IQAS assessment.

Learner Mobility >>>

Prior Learning Assessment and Recognition

PLAR is the process of assessing and recognizing knowledge and skills acquired through non-formal and informal learning in relation to a certain goal, such as receiving credit in a post-secondary program, meeting professional licensure/certification requirements, or obtaining employment. A PLAR assessment may include one or more of the following: challenge exams, oral exams or interviews, performance assessments, product assessments, and portfolio assessments.

PLAR can help increase access to education, eliminate duplication of learning, and increase post-secondary participation. It can support internationally trained graduates with their foreign qualification recognition process and promote partnerships between post-secondary institutions, community organizations, employers, and professional regulatory organizations.

PLAR allows people to get formal recognition for learning they have acquired through informal means (e.g., they have taught themselves, it is a passion area for them, or they have learned from their parents). Learners who are granted PLAR credit will not have to formally learn what they have already learned informally; this saves them money and saves space at the institution. In addition, it saves learners time in getting a credential, which may allow them to enter the labour market sooner.

PLAR and Apprenticeship Programs

Prior learning assessments are available for potential and current apprentices wanting their prior learning recognized for advanced standing in an apprenticeship program. Each year from 2006 to 2010, between 6,000 and 7,000 individuals completed a prior learning assessment. Apprentices from other provinces are recognized at the same level as in their home province.

Post-graduation Mobility >>>

According to the Alberta Graduate Outcomes Survey, Class of 2007–08, the majority of Alberta's post-secondary graduates (89.1%) chose to remain in Alberta following graduation.

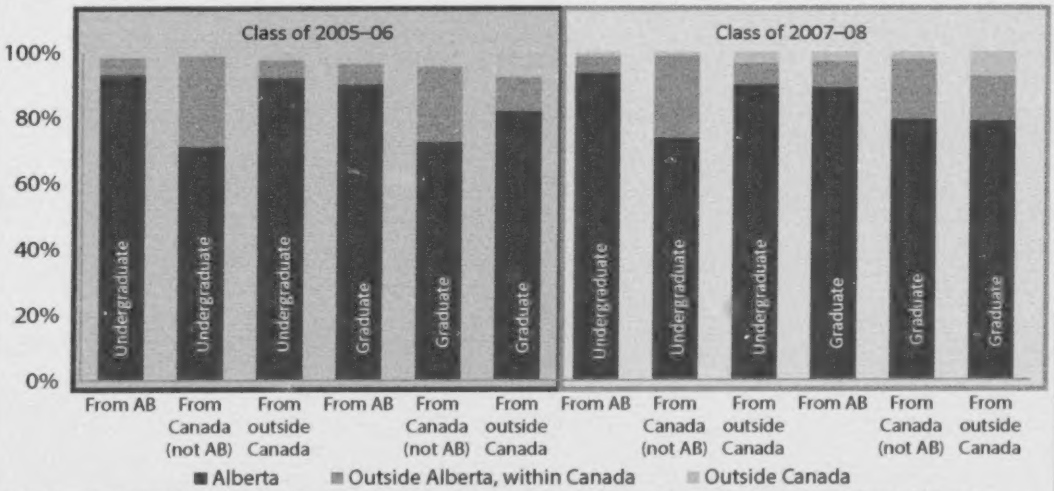
The Alberta Graduate Outcomes Survey[98] asks graduates of Alberta's post-secondary institutions where they were living when they applied to post-secondary and whether they permanently relocated to a different community since graduating. If graduates answered "yes," they were then asked to indicate where they had relocated to. Student locations were then combined to determine student residence after graduation.

Out of 9,734 graduates responding to all three questions outlined above, 9.2% indicated a place of residence elsewhere in Canada, with a small percentage (1.6%) living outside the country. These figures are consistent with those from the Graduate Outcomes Survey, Class of 2005–06, with slightly more graduates from outside Canada (just over 1%) remaining in Alberta two years after graduation.

Alberta's international students also indicate a preference to stay in Alberta after graduation, with about half planning to remain in the province for work and/or further study according to the 2009 Alberta Survey of International Students.[99] The *Graduate Outcomes Survey Class of 2007–2008: Final Report* indicates that overall, 86.2% of international students remained in the province two years following graduation. Those from the Trades and Technology program band were most likely to remain (96.6%), followed by international graduates from the Business (91.6%), and Health Sciences (89.1%) program bands. International graduates from the Legal and Security program band were least likely to remain (66.7%)[100]

International student graduates provide industry with short-term labour supply and contribute to the development of longer-term labour in the province. The international student postgraduate work permit program encourages and supports application to the Alberta Immigrant Nominee Program (with specialized streams including an international graduate category) and Canadian Experience Class immigration streams, addressing industry interest in having more work-ready graduates. In 2009, approximately 1,000 international students transitioned to permanent residency in Alberta.[101]

Location of Residence after Graduation - Coming From



Notes: Undergraduate programs include certificate, diploma, bachelor & applied degrees. Graduate programs include master's degrees, PhDs, and post-degree certificates and diplomas.
Source: Alberta Graduate Outcomes Survey, Classes of 2005–06 and 2007–08.

International Education >>>

International education can be understood as an approach that prepares students for living, working, and lifelong learning in an increasingly interconnected and diverse environment. While the physical movement of students both into and out of the province is integral to the international education experience, the field itself is much broader, encompassing elements like collaborative programs between institutions across borders, international projects, and the incorporation of a global perspective into classroom learning. International education encourages the movement of people, ideas, and practices in order to broaden learning opportunities; encourages the cross-pollination of research and expertise; prepares learners to function in diverse and changing contexts; and supports the meeting of economic, demographic, and labour market needs.

The student flow aspects of international education include both the movement of Albertan students outside of Canada and of international students within Canada. International students include students in Canada on a visa and refugees, neither of which have permanent residency status in Canada.

Alberta's future prosperity requires that learners enrolled in Campus Alberta have broad knowledge and expertise, flexible and adaptable skill sets, cross-cultural skills, and a global perspective. International education is a key building block in developing a more diverse, knowledge-based economy and, with its strong ties to research, is key to fulfilling Alberta's innovation potential.

EAE has continued its work in the international education arena with the *International Education Framework*, released in November 2009.[102] EAE is working on strategies to operationalize the framework's outcomes and strategic priorities.

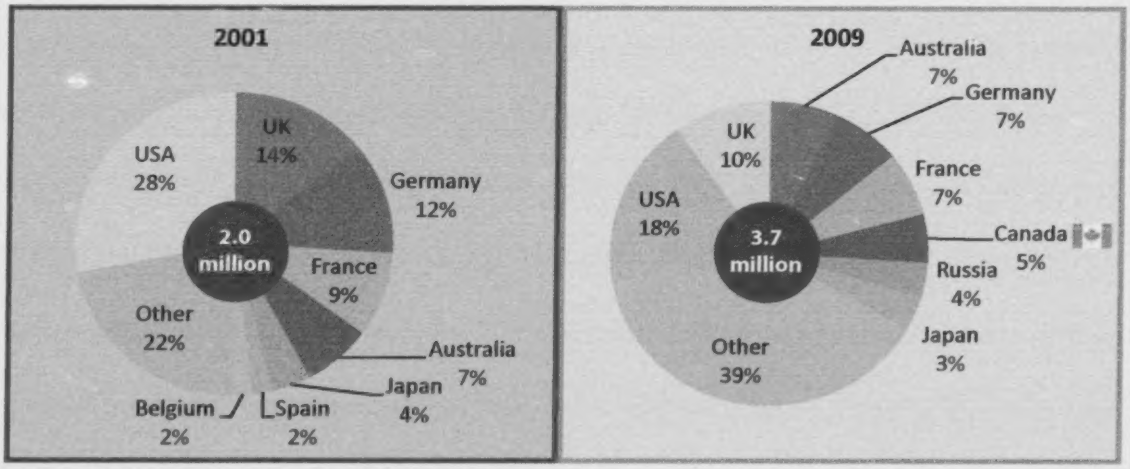
The Global Picture

International education's economic impact is a key driver of competition among markets. International education services accounted for 5.5% of all jobs in Canada's educational services sector in 2008, totalling 64,940 jobs. The same year, international students in Canada spent over $6.5 billion on tuition, accommodation, and discretionary spending, created over 83,000 jobs, and generated over $291 million in government revenue.[103]

International students' economic impact is also evident in the labour market. In Alberta, about 40% of surveyed international students reported working while studying: 84% part-time and 63% on campus.[104] Alberta needs to retain international students to meet its labour market and skill needs.

The economic potential, combined with the fact that the populations of all of the top-choice countries for international students (United Kingdom, United States, Australia, and Canada) are aging and many are facing key skill shortages (often in the same areas), make this young, mobile, and educated group of students highly sought-after.

International Student Destinations Globally, 2001 and 2009



Notes: Includes students at the post-secondary (tertiary) level.
Percentages may not total 100% due to rounding.
Source: Organization for Economic Cooperation and Development. Education at a Glance (2011 and 2003).

Most of Alberta's international students come from Asia. China, the Republic of Korea, and India are the top three source countries.[105] These are also the top source countries for international students at the national level. A number of key source countries for Canada, including Japan and Hong Kong, show downward trends, while emerging markets such as Vietnam and Malaysia show upward trends. For Asia and Europe, trends show a larger number of international students studying outside of their national border, but increasingly within their region (i.e., more Asian learners study abroad but within Asia, and more European learners study abroad but within Europe). However, for North and South America, the out-of-region flows appear to be increasing. National policies around labour, research and innovation, and economic development are being tied closely to international talent attraction and retention policies.

China has been the single largest source country for post-secondary international students to Alberta since 2008, when it overtook South Korea.[106] Over recent years, the numbers of South Korean students studying in Alberta and globally have declined. At the university level, the numbers of international students from Iran, India, and Saudi Arabia have demonstrated strong growth, due to demographic pressures within sending countries (e.g., high demand for post-secondary education in Iran) and policies designed to increase cross-country ties and international exposure. For example, the Saudi Arabian government is working to diversify its student placements from the U.S. Increased sponsorship activity by Campus Alberta institutions, strengthened relations between Alberta and sending countries, and increased overseas activity by Campus Alberta institutions are additional factors.

Choosing Alberta

Alberta has the fourth-highest number of international students among the provinces, after Ontario, Quebec, and British Columbia.[107]

Large increases in international student numbers can be masked by overall increases in enrolment. This is the case in provinces like Alberta, which have shown strong overall population growth in recent years. In some provinces, like those in the Maritimes, the share of international students showed relatively large recent increases, but their overall numbers have remained comparatively small.

Consistent with previous years, in 2009 Ontario (35.8%), British Columbia (31.2%), and Quebec (16.6%) attracted most of Canada's international students. Alberta attracted 6.5% of international students to Canada in 2009, the fourth-highest among the provinces. This is a slight decrease from 7.7% in 2008 (based on the total number of student entries).[108] Factors that influence the proportion of international students among the provinces include differences in the number of post-secondary, public, and private institutions; differences in the number of international students registered in non-degree, short-term programs less than six months in length versus degree programs; and the varying reliance upon one or two countries to drive almost all significant growth. Issues may arise when relying upon one or two countries, as students from China, for example, show higher rates of returning home after graduating; thus, this strategy may show limited support for long-term labour development.

In order to gain better information on Alberta's attractiveness to international students, the first Alberta Survey of International Students (ASIS)[109] took place in 2009. A total of 753 international students from 16 institutions participated, representing about 7.6% of all Alberta international students (based on 2008–09 data).

Entries of Post-secondary International Students to Alberta, 2010 – Top 10 Source Countries

Source country	Students	% of total entries
China	775	20.4%
India	453	11.9%
Korea, Republic of	350	9.2%
Iran	195	5.1%
United States	187	4.9%
Saudi Arabia	137	3.6%
Japan	122	3.2%
Mexico	96	2.5%
United Kingdom	84	2.2%
France	69	1.8%
Other countries	1,332	35.1%
TOTAL	3,800	100.0%

Notes: Entries include first-time and re-entries.

Includes entries in the University, Trade, and Other Post-secondary categories.

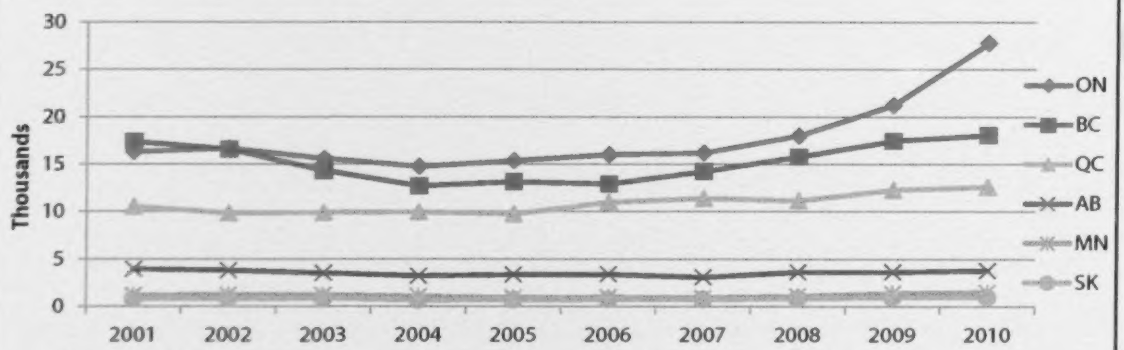
Percentages may not total 100% due to rounding.

Source: Citizenship and Immigration Canada (CIC). Digital Library Facts and Figures: Immigration Overview, 2010.

Overall, findings were consistent with those from the Canadian Bureau of International Education's pan-Canadian international student survey.[110] Students chose Alberta because of its established educational system, high-quality

International Education >>>

Total Entries of International Students - Select Provinces, 2001 - 2010



Note: Includes international students in the University, Trade, and Other Post-Secondary categories.
Source: Citizenship and Immigration Canada (CIC). Digital Library Facts and Figures: Immigration Overview 2010.

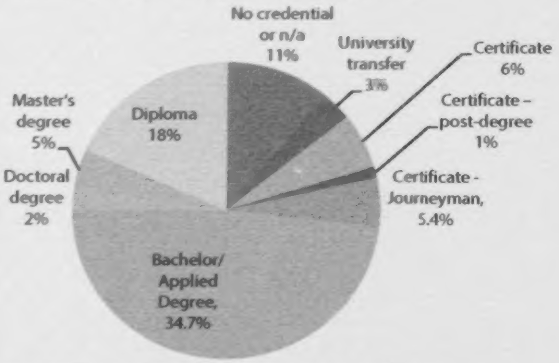
institutions, and economic strength. Institutional websites were the primary way students sourced information about studying abroad, suggesting that awareness about available sources of information on studying in Alberta could be improved.

In terms of their Alberta experience, most international students indicated that they would recommend Alberta to people from their home country as a place to study. The majority agreed that they had made friends with local students, felt comfortable in their classes, and felt welcome on campus. Most students felt that Alberta is a welcoming, safe, and comfortable place to live with many good personal and professional opportunities.

Many students expressed the hope that they would find relevant employment and remain in the province. Half of all students surveyed planned to stay in Alberta after graduation. Of the 478 students planning to look for work after their studies, almost 60% planned to do so within Alberta.

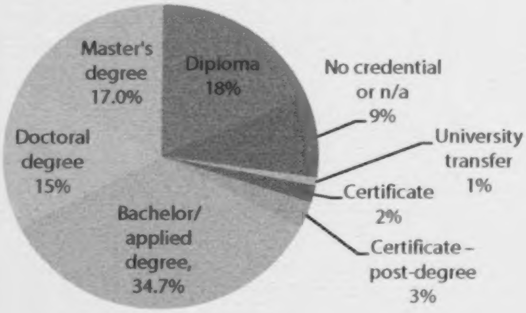
Overall, international students expressed the need to ensure that their study abroad experience is of good value and provides a unique, rewarding, and quality overall experience. Survey results highlight the importance of collaboration between governments and educational providers to ensure that students can access needed information and supports.

Non-Visa Enrolment by Credential (FLE), 2010-11



Notes: Does not include the Banff Centre or Athabasca University.
Certificate and diploma programs include those at the post-basic level.
Apprenticeship and diploma post-degree programs have <0.5% visa enrolment. Percentages may not total 100% due to rounding.
Source: Alberta Enterprise and Advanced Education,
Learner and Enrolment Reporting System (LERS).

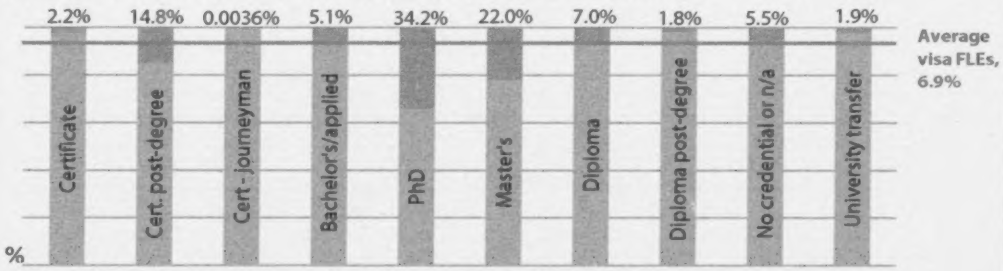
Visa Enrolment by Credential (FLE), 2010-11



Notes: Does not include the Banff Centre or Athabasca University.
Certificate and diploma programs include those at the post-basic level.
Apprenticeship and diploma post-degree programs have <0.5% visa enrolment. Percentages may not total 100% due to rounding.
Source: Alberta Enterprise and Advanced Education,
Learner and Enrolment Reporting System (LERS).

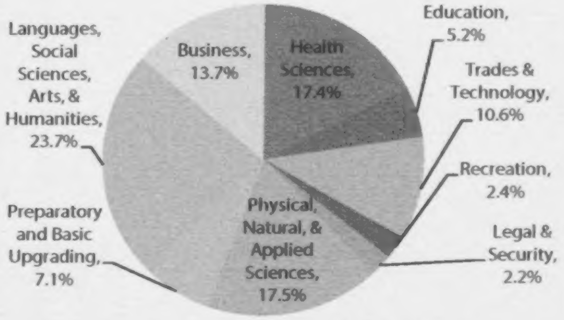
International Education >>>

Visa Enrolment as a Proportion of Total Enrolment by Credential (FLE), 2010-11



Notes: Does not include the Banff Centre or Athabasca University.
Certificate and diploma categories include those at the post-basic level.
Source: Alberta Enterprise and Advanced Education, Learner and Enrolment Reporting System.

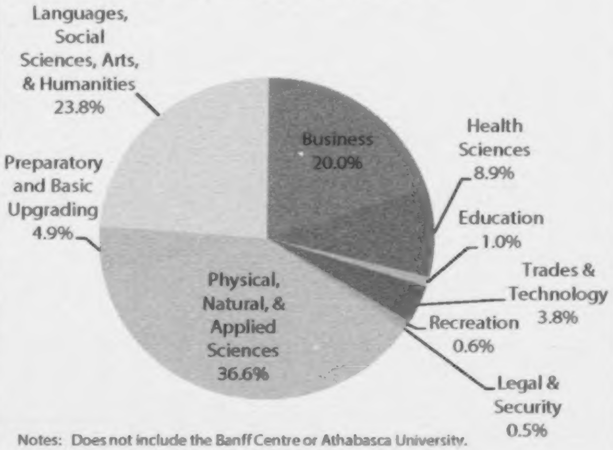
Non-Visa Enrolment by Program Band (FLE), 2010-11



Notes: Does not include the Banff Centre or Athabasca University.
Percentages may not total 100% due to rounding.

Source: Alberta Enterprise and Advanced Education,
Learner and Enrolment Reporting System (LERS).

Visa Enrolment by Program Band (FLE), 2010-11



Notes: Does not include the Banff Centre or Athabasca University.
Percentages may not total 100% due to rounding.

Source: Alberta Enterprise and Advanced Education,
Learner and Enrolment Reporting System (LERS).

Available data at the international level shows that students within regions tend to have similar educational preferences. For example, of the mobile students studying in the United States in 2007, about 53% of those from South and West Asia studied Engineering, Manufacturing, and Construction or Mathematics and Computer Science programs, compared to those from Latin America and the Caribbean, who largely chose Business and Administration programs (29%).[111]

International Student Enrolment

In Alberta, international students make up a significant proportion of the graduate student population—those students enrolled in master's and doctoral degree programs. Graduate students are the province's future professors and researchers. They are integral to fulfilling Alberta's innovation potential. In 2010–11, international student enrolments (full-load equivalent) made up 22.0% of all master's and 34.2% of all doctoral students attending Alberta post-secondary institutions.

Compared to Alberta's non-international student population, international enrolments are also far more likely to be in programs in the Physical, Natural, and Applied Sciences program band (36.6% for international students compared to 17.5% for non-international students in 2010–11).

Most of Alberta's international enrolments are in bachelor's/applied degree programs (34.7%), followed by diploma (18.6%) and master's degree (17.0%) programs.

International Education >>>

Albertans Studying Abroad

While global competition for international students is growing, so is the demand for international educational experiences. Globally, demand for international education is estimated to grow from 1.9 million students today to 7.2 million by 2025.[112]

A 2006 survey by the Association of Universities and Colleges of Canada estimates that 2.2% of Canadian students have studied abroad.[113] Looking at countries' outbound mobility ratios—the proportions of their students studying abroad—Canada was ahead of the United States (0.3%), United Kingdom (1.2%), and Australia (1.0%) but behind others like Norway (6.2%) and Ireland (10.5%), according to 2006 figures reported by the UNESCO Institute for Statistics.[114]

Globally, most mobile students travel to pursue degree programs. The UNESCO Institute for Statistics estimates that 45,892 Canadian students studied abroad in 2009. About 64% of Canadian students studying abroad do so in the U.S.[115]

While there is currently no direct mechanism to track Albertans who choose to study outside the province, some indication of the number of Albertans leaving the province to study can be obtained from student financial assistance (SFA) data. Students must indicate the institution they will attend on their SFA application form. From these application forms, EAE is able to track SFA recipients. The proportions of SFA recipients studying outside the province and abroad are used as a proxy for the overall proportion of Albertans who leave the province to study.

In 2011–12, about 83% of Alberta SFA recipients remained in the province to study, and about 14%

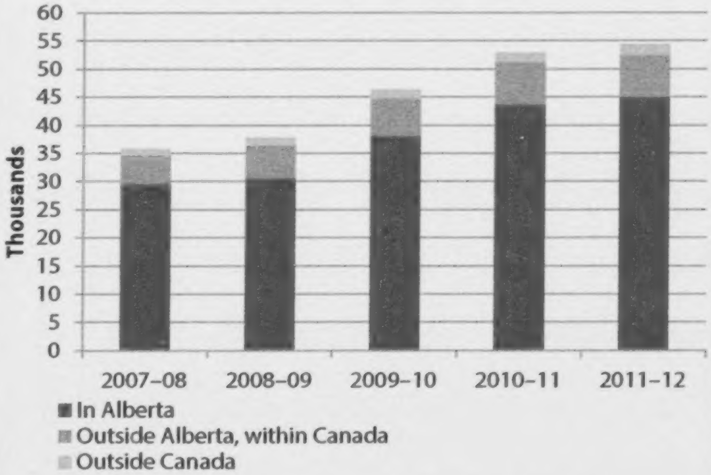
(7,596 students) studied elsewhere in Canada. A total of 1,898 learners received SFA to study abroad, representing about 3% of learners receiving SFA.

About 80% of these learners pursued graduate or professional studies. This number is consistent with the previous year.

An attempt to better understand the study abroad patterns of Alberta students was furthered in 2010 with the inclusion of a study abroad section in the Alberta Graduate Outcomes Survey, Class of 2007–08, which surveyed graduates from Alberta post-secondary institutions. According to survey results, about 6% of graduates enrolled in a study abroad program during their academic careers. Graduates who completed a bachelor's or applied degree and who studied in the Languages, Social Sciences, Arts, and Humanities program band were most likely to have studied abroad. Of the respondents to the Alberta Graduate Outcomes Survey, Class of 2007–08 who indicated that they had participated in a study abroad program at some point, the most popular destinations were Germany, Mexico, and the United States (all at 9%), followed by France (8%), China (6%), and the United Kingdom and Italy (both at 5%).[116]

At the Canadian level, when students in general were asked a hypothetical question about the countries in which they would choose to study if they could, nearly 50% indicated that they would choose English-speaking countries, with the United Kingdom and Australia being the most popular. The proportion of students who indicated that they would choose non-Western countries—the major source countries for international students coming to Canada—was negligible. For example, only 2% of surveyed students cited China and 1% India as desired destinations.[117]

Study Location of Albertans Receiving Financial Assistance



Notes: Includes only those students receiving Alberta Student Finance assistance in the reporting year.
Source: Alberta Enterprise and Advanced Education, Student Fincance.

International Education >>>

Data Gaps

The international education arena needs a consistent approach to international student data at the global level in order to support more reliable comparative analysis and sound planning. In Alberta, there are several areas where improved data and information would contribute to understanding and developing international education. These include:

- The ability to collect and track data on Albertans choosing to study outside the province
- A greater understanding of student choice factors and mobility patterns to support targeted recruitment and retention efforts
- The ability to track international students beyond the immediate years after graduation in order to assess retention rates
- The development of metrics and information for examining areas of international education beyond student recruitment and retention

Chapter Five

DEMAND AND CAPACITY

Overview >>>

To maintain affordability and accessibility, demand for post-secondary opportunities must be aligned with the system's capacity to deliver them. Flexibility is required in order to meet the changing needs of today and the fluctuating demand that occurs unequally across institutions, regions, and programs. An understanding of application and enrolment trends, combined with a realistic picture of what the system can accomplish within given resource constraints, will enhance Campus Alberta's responsiveness to the needs of learners, the labour market, and society.

CHAPTER HIGHLIGHTS:

- The number of applicants to Alberta's publicly funded post-secondary institutions in fall 2011 increased 1.9% over the previous year. Application trends are impacted by institutional activities, student behaviour, and the strength of the economy.
- While the number of turn-aways increased in fall 2011, an additional 1,237 students received offers of admission in 2011 over the previous year.
- Programs with the greatest student demand continue to be those with the highest labour market demand, namely those in the Health Sciences and Trades and Technology program bands.
- Alberta's advanced education system can expect peak enrolment growth of about 10,590 full-load equivalent students over 2011-21. Varying levels of enrolment growth are expected across programs, institutions, and regions.
- Significant upfront investments have been made in recent years to increase Campus Alberta's capacity to meet higher learner and economic demand.
- As demand fluctuates with the province's economic context, maintaining the right degree of flexibility in the system must be a priority.

KEY QUESTIONS:

- How can the post-secondary system continue to increase access for learners given increasing demand and potentially limited resources?
- How can students be encouraged to apply to more than one program or institution, given that capacity may exist in secondary choices?
- How do we balance the differing post-secondary education needs and demands of urban and rural communities?
- Given that the highest numbers of turn-aways are in areas aligned with the highest-priority program areas, are there steps that need to be taken? How can we balance labour market need for specific programs with student demand?

Applying to Post-Secondary Education >>>

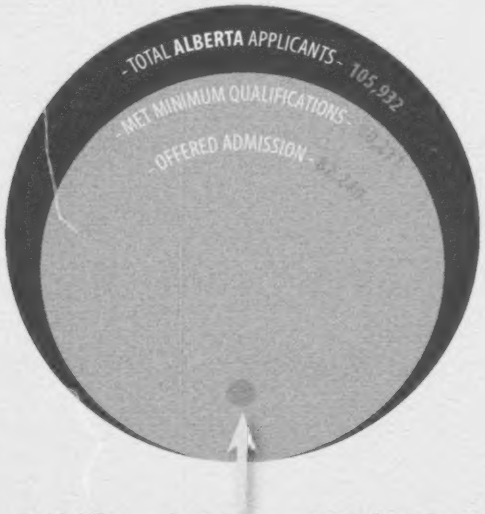
In Alberta, data on the numbers of applicants and applications to post-secondary programs beginning in the fall at publicly funded institutions is collected through the Application Submission Initiative (ASI) database. Using postal codes on post-secondary application forms, EAE can track where students apply from and where they attend post-secondary education. This data provides both an indication of demand and a snapshot of student mobility. While some students may move to the region of anticipated post-secondary attendance and then apply for post-secondary education, postal code data provides a good indication of student flows among regions, particularly when combined with other data, such as those based on the Alberta Student Number. Data on applicants and applications is a snapshot in time, based on applicants to programs beginning in the fall session of an academic year.

Application data for fall 2011 shows an increase in the total number of applicants and the number of applicants offered admission to post-secondary programs. A total of 232,385 applications were received from 154,223 applicants for post-secondary programs in Alberta in 2011—an increase of 7,887 applications (3.5%) from 2,865 additional applicants (1.9%) compared to fall 2010. Reflecting the increase in the number of applicants in 2011, the number of qualified applicants (those meeting the minimum academic standards) increased by 1.8%. A total of 91% of qualified applicants were offered admission, resulting in about 1,200 more applicants receiving offers in 2011 than in 2010.

ALBERTA POST-SECONDARY SYSTEM

FALL 2011 ACCESS AT A GLANCE...

ALBERTA APPLICANTS:

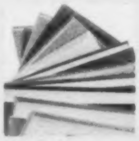


Qualified Alberta applicants that were **not attending** in the system - 6,332

(turn-aways)

WHERE MIGHT THEY BE?

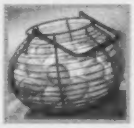
ATTENDING:
- Private institution
- Out-of-province
- Out-of-country



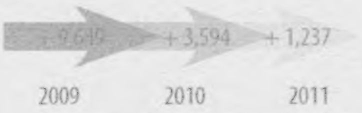
UPGRADING:
- Improving marks to get into desired program

91% of all applicants that meet minimum qualifications are offered admission

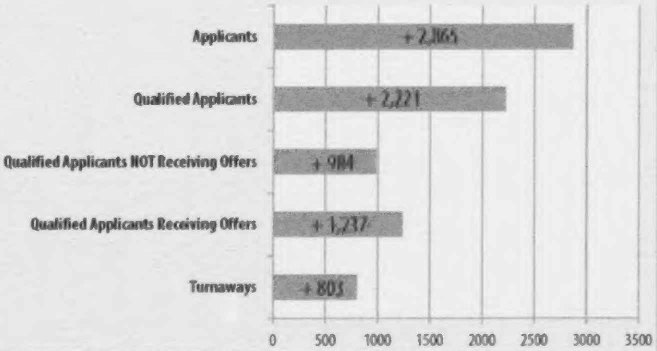
70% of all applicants apply to only 1 program at 1 school



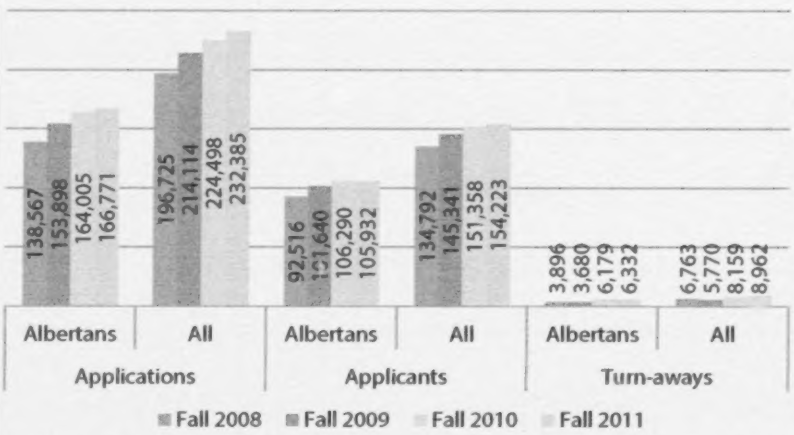
More students offered admission in each of the last 3 years



INCREASES from FALL 2010 to 2011



Applying to Post-Secondary Education >>>



Post-secondary Education Applications

Notes: In 2010, all apprenticeship records were removed from ASI. All historical values have been restated to reflect this change. In 2008, Athabasca University began reporting only applicants who were not students in the previous year or those that applied for program transfer. Applicants were assigned Albertan status based on their postal code at their time of application.

Source: Alberta Enterprise and Advanced Education - Applicant Submission Initiative (ASI).

A total of 166,771 applications were from Alberta residents (an increase of 2,766). Although the total number of applications from Albertans increased, the number of Albertans who applied to post-secondary programs decreased marginally (from 106,290 in 2010 to 105,932 in 2011). The decrease in the number of Albertans applying for post-secondary programs in 2011 may be due to the economic growth seen in the province in the past year.

Application trends are impacted by institutional activities and by student behaviour. In fall 2011, approximately 70% of students applied to only one program and one institution. These students did not apply to an alternative Alberta-based program for the academic year if they were not offered admission for their first-choice program. This trend poses a challenge for policy makers and system planning, as some institutions and regions face increasing demands and capacity constraints while others with similar programming face declining demand. It may also point to the need to encourage learners to broaden their range of educational possibilities and have a backup plan in case they are unable to attend their first-choice program. Government and the system may need to improve communication to potential learners about the opportunities available throughout Alberta and the excess capacity at many institutions (particularly those outside Edmonton and Calgary). These trends may also point to the need to address barriers to application within the system, which could include user fees and extensive application processes.

The 2008 Alberta Survey of Qualified Applicants surveyed Albertans who were qualified and were offered admission at one of Alberta's publicly funded post-secondary institutions, but chose not to attend. The main reason cited for this choice was to take advantage of labour market opportunities (20%). Other top reasons included financial barriers (17%) and a change of mind (14%). A total of 6% of survey respondents decided to attend a post-secondary institution outside Alberta.[118]

Data demonstrate that, as in previous years, most Albertans applying to a publicly funded post-secondary institution in Alberta apply to the region they are from (based on their postal code at the time of application). This is the case for every service region except the Lakeland region, where 51.9% of applicants apply to institutions in the Edmonton region.

The Edmonton region attracted the most non-Albertan Canadian applicants (46.7%) in fall 2011, followed by the Calgary (42.1%) and Lethbridge (7.2%) regions. While these figures may, in part, be due to some institutions in the Calgary region reporting Alberta postal codes as "unknown Canadian" postal codes, they are consistent with learners being more likely to change provinces to attend university over other types of post-secondary learning and with the general trend toward urbanization. Internationally, applicants are even more attracted to the major urban centres and to Comprehensive Academic and Research Institutions, with 68.5% of applicants from outside Canada applying to the Edmonton region and 29.7% to the Calgary region.

This information may suggest:

- Students are most familiar with institutions in their home regions and feel most comfortable applying there, which could indicate that they do not have enough information about all the different opportunities available to them throughout the province. Post-secondary institutions may need to better market themselves to students in all regions of the province.
- The costs associated with relocating to another region of the province are a barrier for many students. As a result, students' options may be limited as they pursue training in fields offered in their home region. Increasing institutional partnerships, or using e-learning as a means for delivery, may help to address such limitations.
- With respect to the Lakeland region, the data above may suggest a need for improved collaboration and partnerships to increase the types of training that students can pursue. Such measures could eliminate the need for students to leave their home region in order to access the training they need.

Institutions in regions with higher populations will likely see greater demand for post-secondary access. Linking back to the data on intraprovincial migration, this means that urban institutions, particularly those in Calgary and Edmonton, will see demand increase while rural institutions see decreases. This trend may also require greater collaboration among institutions to address capacity challenges in Alberta's largest cities.

Detailed tables on application trends are provided in Appendices B1–B4.

Learner Demand >>>

Understanding access pressures at the system, regional, and program levels helps better target resources and align demand for learning opportunities with the capacity of the post-secondary system. While looking at learner demand in excess of capacity is an important aspect of post-secondary demand, it must be viewed alongside information on applicants and applications, labour market demand for graduates, and learner perception of labour market potential of programs in order to properly inform and align planning and priority setting.

Turn-away data is a snapshot in time, based only on applicants for the fall session of an academic year. The turn-away measure helps assess which programs, institutions, and regions have the greatest demand. The aim is to better align demand and capacity within Campus Alberta.

While turn-away figures offer some insights on learner demand, they should be interpreted in the context of other relevant information, such as the number of applicants, number of qualified applicants, and number of admission offers made. Turn-away figures may be somewhat overstated, as they include qualified Albertans who were not offered admission at a publicly funded post-secondary institution in the province, but may have attended either a private institution in Alberta or a post-secondary institution outside the province. Currently, EAE is unable to track all students who pursue post-secondary education outside Alberta.

System-Level Pressures

A system turn-away is an applicant who meets all of the following criteria:

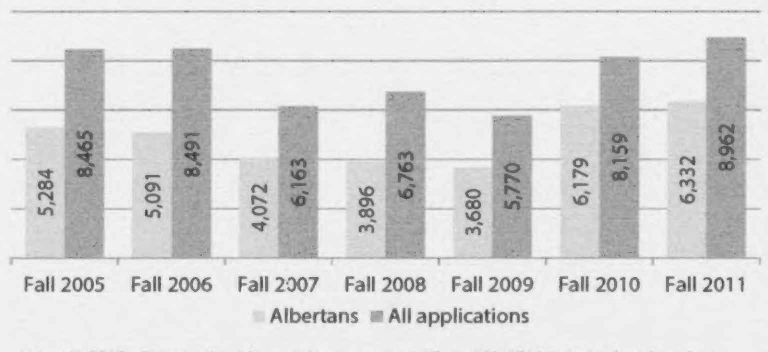
- Met the minimum qualification requirements in at least one application
- Was not offered admission to any program to which he or she applied
- Did not attend a publicly funded post-secondary institution in Alberta that academic year

Being qualified is based solely on meeting the minimum academic requirements as outlined in institutions' course calendars, and does not consider such things as portfolio assessments or competitive grade point average (GPA) requirements. Individual institutions set criteria for what constitutes a qualified applicant for their programs. For example, a student who was qualified but did not gain acceptance at one institution, but was subsequently offered admission to or attended another institution, would not be considered a system turn-away because Alberta's publicly funded advanced education system was able to accommodate him.

While turn-aways are defined as individuals who submitted at least one application to an institution, met minimum academic qualifications, and did not receive an offer nor attend any institution within Alberta's publicly funded post-secondary system, they are not the same as qualified applicants who are not offered admission. Qualified applicants may not receive letters of offer for a number of reasons—for example, many programs have quotas for a variety of reasons based on labour market demand or available practicum and clinical placements. Students who are turn-aways have not necessarily chosen not to attend post-secondary. These students could be attending outside of the institutions reported in ASI (i.e., private institutions, out-of-province/country institution, academic upgrading outside of post-secondary institutions).

For the past two years, there has been an increase in the number of system turn-aways. The number of system turn-aways in fall 2010 was 8,159 and in fall 2011 was 8,962. While the number of turn-aways increased over the period of fall 2009 to fall 2011, so did the number of applicants. The economic downturn, the increasing need for post-secondary education as a prerequisite to labour market success, and high labour market demand for particular programs all influenced the number of turn-aways. Although the number of turn-aways has increased, 1,237 more students received offers of admission in 2011 than in the previous year.

Turn-Aways



Notes: In 2010, all apprenticeship records were removed from ASI. All historical values have been restated to reflect this change. In 2008, Athabasca University began reporting only applicants who were not students in the previous year or those that applied for program transfer. Applicants were assigned Albertan status based on their postal code at their time of application.
Source: Alberta Enterprise and Advanced Education - Applicant Submission Initiative (ASI).

Learner Demand >>>

Regional Pressures

A regional turn-away is an applicant who meets all of the following criteria:

- Met the minimum qualification requirements in at least one application to a program in that region
- Was not offered admission to any program to which they applied in that region
- Did not attend a publicly funded post-secondary institution anywhere in that region in that academic year

Take, for example, a student who applies to a program at an institution in the Lakeland region and to a program at an institution in the Portage region. She is qualified for both programs, but is only offered admission to the program in the Lakeland region. The student is counted as a regional turn-away from the Portage region, but is not a turn-away at the system level because Alberta's publicly funded post-secondary system was able to accommodate her.

There continues to be high demand at institutions in the Calgary and Edmonton regions. Of all service regions, the Calgary region has consistently had the greatest number of Albertan turn-aways, at 3,611 in fall 2011—an increase of about 400. The Edmonton region had the second-highest number of Albertan turn-aways, at 2,915. The high demand in the Edmonton and Calgary regions is due in part to their being major urban centres and in part to their being home to Alberta's two Polytechnical Institutions. Trades and Technology programs have demonstrated high learner and labour market demand over recent years.

Program-Level Pressures

A snapshot of turn-away data is also available at the program or field-of-study level. While qualified individuals are considered to be turn-aways at these individual program levels, many may still be attending other programs within Alberta's advanced education system.

As in the previous five years, Health Sciences had the highest number of Albertan turn-aways in fall 2011 (2,509). It was followed by Trades and Technology (1,650) and Languages, Social Sciences, Arts and Humanities (1,333). Health and trades fields have recently demonstrated strong labour market demand, increasing student demand for these programs. Approximately half of Albertan turn-aways applied to programs in the Polytechnical Institutions sector.

The number of turn-aways from the health program band may be partly due to quotas that limit student spaces in light of high demand. These quotas are in place for a number of reasons, including labour market demand for graduates and the availability of clinical placements in the community (e.g., in sonography or respiratory therapy). Investments through the Health Workforce Action Plan are helping support increased access to health programs, particularly for doctors, Registered Nurses (RNs), and Practical Nurses (PNs).

By 2011–12, approximately 295 doctors, 2,000 RNs, and almost 1,000 PNs per year will graduate from publicly funded post-secondary institutions in Alberta. Additional funding of $85 million invested in 2010–11 ensures that graduate targets are increasing or maintained until 2015–16. This funding supports enrolled students and enhances access to high-demand programs for prospective students.

Albertan Turn-Aways by Service Region (Applying to)

Geographic service region	Fall 2005	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011
Calgary	4,518	4,350	2,816	2,100	2,021	3,197	3,611
Central	278	199	152	144	84	95	101
Edmonton	777	771	1,239	1,746	1,568	3,090	2,915
Grande Prairie	--	--	--	1	29	12	22
Keyano	--	--	--	18	56	--	2
Lakeland	--	6	21	--	--	16	32
Lethbridge	86	32	28	19	43	58	63
Medicine Hat	8	4	7	4	14	24	55
Northern Lakes	--	61	26	11	16	38	17
Portage	15	15	36	10	4	38	5
Athabasca University	--	--	--	--	--	--	--
Alberta	5,284	5,091	4,072	3,896	3,680	6,179	6,332

Notes: Does not include the Banff Centre. Summing the rows will not equal the provincial total, as students may have been turned away from one region and offered admission in another. In 2010, all apprenticeship records were removed from ASI. All historical values have been restated to reflect this change. Applicants were assigned Albertan status based on their postal code at the time of application.

Source: Alberta Enterprise and Advanced Education, Application Submission Initiative (ASI).

Learner Demand >>>

Additional funding is also being provided to increase the number of power engineering graduates across the province.

Detailed tables on application trends are provided in Appendices B5–B6.

This turn-away data demonstrates that while some of the high turn-away bands are areas of high labour market demand, this is not always the case. Post-secondary institutions may need to consider the appropriate role they can play in meeting learner demands when doing so may not be directly aligned with contemporary labour market needs. This will undoubtedly have implications for institutions' financial resources. Government and institutions must work together to facilitate an appropriate balance, in order to ensure that all learner demands, interests, and ambitions can be effectively accommodated, while still serving the economy.

Top 10 Fields of Study for Turn-Aways, Fall 2011

Albertan Turn-Aways		All Turn-Aways	
Allied Health Diagnostic, Intervention, and Treatment Professions	587	Allied Health Diagnostic, Intervention, and Treatment Professions	883
Liberal Arts and Sciences, General Studies and Humanities	576	Medicine (M.D.)	807
Nursing	446	Liberal Arts and Sciences, General Studies and Humanities	639
Medicine (M.D.)	372	Law (First Professional Degree)	593
Allied Health and Medical Assisting Services	330	Nursing	588
Culinary Arts and Related Services	299	Allied Health and Medical Assisting Services	378
High School/Secondary Diploma Programs	299	Culinary Arts and Related Services	346
Vehicle Maintenance and Repair Technologies	292	Vehicle Maintenance and Repair Technologies	327
Stationary Energy Sources Installers and Operators	245	High School/Secondary Diploma Programs	317
Clinical/Medical Laboratory Science and Allied Professions	235	Clinical/Medical Laboratory Science and Allied Professions	314

Notes: Fields of study are listed by four-digit Classification of Instructional Programs (CIP) code. Table does not include data from the Banff Centre. Applicants were assigned Albertan status based on their postal code at the time of application.

Source: Alberta Enterprise and Advanced Education, Application Submission Initiative (ASI).

Albertan Turn-Aways by Program Band (Applying to)

Program band	Fall 2005	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011
Business	809	680	559	534	367	503	461
Education	230	254	173	69	94	143	119
Health Sciences	1,542	1,443	1,315	1,162	1,147	2,347	2,509
Languages, Social Sciences, Arts and Humanities	1,528	1,195	579	500	402	1,177	1,333
Legal and Security	356	369	276	195	195	393	341
Physical, Natural and Applied Sciences	830	826	523	492	412	616	653
Preparatory and Basic Upgrading*	26	88	362	492	806	396	364
Recreation	91	89	43	53	66	152	129
Trades and Technology	889	978	903	988	726	1,489	1,650
All Program Bands	5,284	5,091	4,072	3,896	3,680	6,179	6,332

Notes: In 2010, all apprenticeship records were removed from ASI. All historical values have been restated to reflect this change. Applicants were assigned Albertan status based on their postal code at the time of application. Does not include the Banff Centre. In 2008, Athabasca University began reporting only those applicants who were not students in the previous year or those who applied for program transfer. Some values may not reconcile with future data queries or previously stated values due to work with Statistics Canada on Classification of Instructional Programs (CIP) codes. The sum of the rows will not equal the provincial total, as students may have been turned away from one program band and offered admission in another.

* This is partly a result of the current space situation due to construction activities at Bow Valley College beginning Fall 2007.

Source: Alberta Enterprise and Advanced Education, Application Submission Initiative (ASI).

Enrolment Projections >>>

In alignment with Alberta Education, Alberta Treasury Board and Finance, and Alberta Health, EAE created the EAE Enrolment Forecasting Model—also known as In-jector.[119] In-jector serves as a springboard for thoughtful, strategic conversations about future enrolment trends at post-secondary institutions based on data and sound forecasting methodology. It gives planners a platform for considering future student populations and their potential impact on budgets, staffing, programs, and facilities. In-jector can also be used to create scenarios based on assumptions about the underlying drivers of enrolment in institutions and programs.

In-jector uses historical data patterns to determine input variables for calculating future enrolment. When all of these variables are entered, the model can create projection scenarios. Three sets of variables are used:

- Uptake levels: Used to determine the number of new enrolments at an institution each year, uptake levels are based on the number of entrants to an institution from the K–12 system over 10 years (assuming that all the institution's enrolments came from the underlying service area—for CARIs, this is Alberta; for all other institutions, it is their service region).
- Retention levels: The percentage of the previous academic years' full-load equivalents (FLEs) that remain in the current academic year.
- Program proportions: The percentage of institutions' gender-based enrolments in each program band.

In-jector uses cohorts of high school 17-year-olds aged according to the year being forecasted to predict new enrolments (FLE). It uses the previous year's enrolments and applies age-specific retention rates to predict retained FLEs. Total FLEs are then broken into program bands using institution-specific proportions.

The size of each single-year 17-year-old cohort is an output of Alberta Education's Student Population Projection and Teacher Forecasting Model. Alberta Education's model predicts student counts using detailed population data from Alberta Health, as well as several other sources. Historic enrolment data (including new enrolments, retention, and program proportions) is derived from information that publicly funded post-secondary institutions submit to EAE's Learner and Enrolment Reporting System (LERS).

While formula-driven, the model can take into account data anomalies, such as sudden drops or increases in enrolment. The table below outlines enrolment growth projections by service region, based on roll-ups of institution-level figures. Enrolment growth is expected to vary among institutions and, in most cases, is not expected to follow a linear growth path. Rather, institutions may reach a peak enrolment and then decline. The projected peak enrolment growth is the sum of all enrolment increases over the forecast period.

Most institutions will see enrolment increases in some years and decreases in others, reaching peak enrolment before the end of the projection period in 2020–21. The projected enrolment range represents the lowest and highest levels of enrolment within the region over the projection period and does not necessarily equate to 2010–11 and 2020–21 enrolment levels.

Over the 2010–11 to 2020–21 projection period, enrolment growth is expected to vary across the system to a total peak enrolment increase of 10,590 FLEs. The highest peak growth is anticipated in the Calgary region, followed by the Edmonton region.

Projected Enrolment Growth (FLE) by Service Region, 10-Year Forecast

Geographic service region	Projected peak enrolment growth 2011-21	% of total
Calgary	5,770	54.5%
Edmonton	3,540	33.4%
Central	90	0.8%
Lethbridge	215	2.0%
Medicine Hat	-	0.0%
Grande Prairie	415	3.9%
Keyano	10	0.1%
Lakeland	-	0.0%
Northern Lakes	60	0.6%
Portage	50	0.5%
Athabasca	440	4.2%
Total	10,590	100.0%

Notes: All figures are in FLEs. Does not include the Banff Centre. Peak enrolment is the maximum expected enrolment growth over the period. The peak figure does not take into account enrolment decreases; annual enrolment increases are summed to derive a peak increase.

Source: Alberta Enterprise and Advanced Education - Enrolment Forecasting Model.

System Capacity >>>

Assessing institutions' capacity to accommodate learners is critical to identifying space pressures resulting from projected enrolment growth in the post-secondary system. It also supports the effective use of existing resources by helping align demand and capacity.

Assessing projected system capacity has two elements: determining existing institutional capacity and calculating the capacity that will result from capital projects that are approved or under way but not yet completed.

Estimates of institutional capacity are based on enrolment data, which indicates the level of enrolment an institution has historically been able to accommodate, including collaborative and Learner-Funded Designated Only (LFDO) programs.[120]

Estimating how much capacity will be provided by capital projects that are approved or under way is done using information from institutions' capital project descriptions. Institutions submit business cases and project descriptions through Alberta Infrastructure's Building and Land Information Management System (BLIMS). The estimated increase in capacity is updated by the institution as its project develops. The estimated capacity increase resulting from institutions' approved capital project(s) is one of the factors in assessing the need for the project, prioritizing it in the capital-planning process, and gaining approval through the provincial capital plan.

Over the 10-year forecast period, Campus Alberta is well positioned to meet anticipated demand for post-secondary education at the system level. As the table below demonstrates, over the 2010–11 to 2020–21 forecast period, a capacity surplus of about 4,548 full-load equivalents (FLEs) is anticipated at the system level. However, capacity levels vary across regions and institutions, with some institutions in the high-demand regions of Edmonton and Calgary posting a shortage of capacity to meet projected demand. These regional capacity issues could result in a number of learners in Edmonton and Calgary not being accommodated within the system, forcing potential learners in Alberta's two largest cities into alternative paths (such as entry-level labour force positions that are misaligned with their career goals).

Capacity issues could also have financial implications for institutions outside Calgary and Edmonton, as excess capacity there would mean reduced tuition revenue to address operating costs. Excess capacity diminishes system-level efficiency, which would drive-up per-student costs for the government. These capacity issues may require increased collaboration between institutions in Edmonton and Calgary with institutions outside those cities.

Recently completed expansions and the approved capital projects under way will help accommodate enrolment increases in response to both learner and labour market demand. Capacity expansions also address facilities that have been overused recently due to high demand in specific program areas, such as technical trades training and nursing.

New capital projects, however, are not the only way to increase access. Post-secondary institutions can respond to increased student demand and higher levels of enrolment by maximizing the use of existing buildings and looking for collaborative opportunities within the system. Strategies may include implementing a trimester program delivery model, increasing the number of scheduled teaching and learning hours per week, maximizing classroom seats and/or accommodating faculty and staff in shared space or open-concept work areas. As part of their stewardship role, Comprehensive Community Institutions can explore opportunities to partner with community adult learning organizations in order to maximize available capacity within their regions.

Capacity and Forecasted Enrolment by Institution and Service Region

Institution	2012-13 existing capacity	Approved expansion / under construction	2020-21 projected capacity	Projected enrolment range 2010-11 to 2020-21*		Surplus/ (shortage) to meet High
				Low	High	
Alberta College of Art and Design	960	--	960	1,003	1,075	(115)
Ambrose University College	1,000	--	1,000	371	389	611
Banff Centre**	550	--	550	n/a	550	0
Bow Valley College	8,000	--	8,000	4,493	5,069	2,931
Mount Royal University	10,165	275	10,440	9,994	11,428	(988)
Southern Alberta Institute of Technology	14,600	--	14,600	11,861	12,859	1,741
St. Mary's University College	500	--	500	404	435	65
University of Calgary	25,335	--	25,335	26,859	29,482	(4,147)
Total Calgary region	**61,110**	**275**	**61,385**	**54,985**	**61,287**	**98**
Canadian University College	500	--	500	410	429	71
Olds College	1,545	--	1,545	1,229	1,278	267
Red Deer College	5,450	--	5,450	3,854	3,989	1,461
Total Central region	**7,495**	**0**	**7,495**	**5,493**	**5,696**	**1,799**
Concordia University College of Alberta	1,800	--	1,800	1,279	1,301	499
Grant MacEwan University	12,100	--	12,100	11,742	12,042	58
King's University College	880	--	880	558	597	283
Northern Alberta Institute of Technology	12,275	--	12,275	13,494	14,054	(1,779)
NorQuest College	4,400	--	4,400	4,515	5,385	(985)
University of Alberta	36,930	1,380	38,310	34,554	36,322	1,988
Total Edmonton region	**68,385**	**1,380**	**69,765**	**66,142**	**69,701**	**64**
Grande Prairie Regional College	2,770	500	3,270	2,014	2,428	842
Total Grande Prairie region	**2,770**	**500**	**3,270**	**2,014**	**2,428**	**842**
Keyano College	1,670	425	2,095	1,395	1,425	670
Total Keyano region	**1,670**	**425**	**2,095**	**1,395**	**1,425**	**670**
Lakeland College	2,225	50	2,275	1,830	2,250	25
Total Lakeland Region	**2,225**	**50**	**2,275**	**1,830**	**2,250**	**25**
Lethbridge College	4,000	--	4,000	3,972	4,077	(77)
University of Lethbridge	7,370	--	7,370	7,050	7,159	211
Total Lethbridge region	**11,370**	**0**	**11,370**	**11,022**	**11,236**	**134**
Medicine Hat College	2,650	200	2,850	2,424	2,547	303
Total Medicine Hat region	**2,650**	**200**	**2,850**	**2,424**	**2,547**	**303**
Northern Lakes College	1,250	75	1,325	1,088	1,144	181
Total Northern Lakes region	**1,250**	**75**	**1,325**	**1,088**	**1,144**	**181**
Portage College	1,260	40	1,300	927	1,037	263
Total Portage region	**1,260**	**40**	**1,300**	**927**	**1,037**	**263**
Athabasca University	8,500	--	8,500	7,892	8,331	169
SYSTEM TOTAL	**168,685**	**2,945**	**171,630**	**155,212**	**167,082**	**4,548**

Notes: All figures are in FLEs. Projected capacity includes existing capacity, recently completed facilities, and approved projects underway.

*The projected enrolment range represents the lowest and highest levels of enrolment within the region over the projection period, and does not necessarily equate to 2010-11 and 2020-21 enrolment levels.

**Forecast data are not available for the Banff Centre. Its existing capacity is used as a proxy for its peak enrolment growth.

Sources: Alberta Enterprise and Advanced Education, Learner and Enrolment Reporting System (LERS), Post-secondary Planning and Investments Branch, In-Jector Enrolment Forecasting Model.

Space Utilization >>>

Alberta's public infrastructure supports the basic quality of life that Albertans have come to enjoy. Although the current fiscal environment limits capital funding that may be available, an analysis of the capacity, utilization, and functionality of existing infrastructure is key to fostering agreement on capital priorities and to providing the most effective solutions to capital program needs across Campus Alberta when funding becomes available. Integrating strong space utilization processes into institutional capital-planning processes allows capital priorities to be based on solid evidence and proper due diligence.

EAE's Space Utilization Initiative is a multi-year initiative that began in 2009. The first phase involved an analysis of institutional space management practices, along with assessing and benchmarking a small portion of the infrastructure at publicly funded post-secondary institutions. According to the space utilization study released in March 2011, many institutions have, or are developing, campus-wide space allocation policies and procedures. EAE recommends that each institution put such procedures in place. Institutions are encouraged to develop policies and procedures that best suit their mandate.

As reported in the utilization study, EAE does not have a framework to assess capacity, utilization, and space requirements. However, we believe that there is currently an opportunity to assess the capacity and utilization of the existing infrastructure to assist the Ministry in its strategic capital planning.

As a first step and to guide institutions in their planning, EAE has established the following benchmarks (fall/winter only) for classroom and instructional lab utilization based on information from other jurisdictions:

- Classroom/instructional lab utilization by day and time: benchmark = 80%
    - Calculation: # of hours of classes scheduled in a room per week / 40 hours per week of bookable time
- Classroom/instructional lab utilization by enrolment and room capacity: benchmark = 80%
    - Calculation: # of students enrolled in a class or instructional lab / maximum seating capacity of the room.

The determination of the maximum seating capacity of each room would be developed by the institution depending on the type of room and program requirements. Institutions are also encouraged to look at space standards that are in place in other jurisdictions, including Ontario and British Columbia, to inform the development of institutional space requirements. Information on these standards is available at:

- http://www.aved.gov.bc.ca/cppm/documents/univ_space.pdf
- http://www.aved.gov.bc.ca/cppm/documents/space.pdf
- http://www.osm.utoronto.ca/standards/room_basics.html

Since every institution is unique, each is encouraged to work with the department in developing metrics and guidelines. Institutions are also encouraged to look at the functionality of the existing space on campus to ensure that the current facilities match program and instructional requirements.

Institutions are not required to submit utilization reports to the Ministry. Institutional data on space utilization should be used to support future iterations of institutional capital plans. The department recommends that utilization data be incorporated into future Comprehensive Institutional Plan documents.

Chapter Six

RESEARCH

Overview >>>

A strong and vibrant research and innovation system supports the province's ability to diversify its economy, meet the changing needs of its citizens and workforce, and better address the technological and societal pressures associated with Alberta's demographic landscape. To this end, Campus Alberta and Alberta Innovates together support mutually beneficial working relationships among post-secondary institutions, researchers, entrepreneurs, and industry.

CHAPTER HIGHLIGHTS:

- Of all institutional sectors, Comprehensive Academic Research Institutions (CARIs) attract the bulk of sponsored research funding—about $850.4 million in 2010–11. From 2006–07 to 2010–11, total sponsored research revenue to the CARI sector increased by 18.2%.
- Non-CARI institutions attracted about $15.5 million in 2010–11. Non-CARI institutions have seen a significant jump in sponsored research revenue in recent years, with a 6.2% increase from 2009–10 to 2010–11.
- In 2009, Alberta had the third-highest overall spending ($344 million) on research and development among the provinces.
- In 2009, Alberta employed 18,130 personnel engaged in research and development; about 65.5% were researchers, 23.3% were technicians, and 11.2% were support staff.

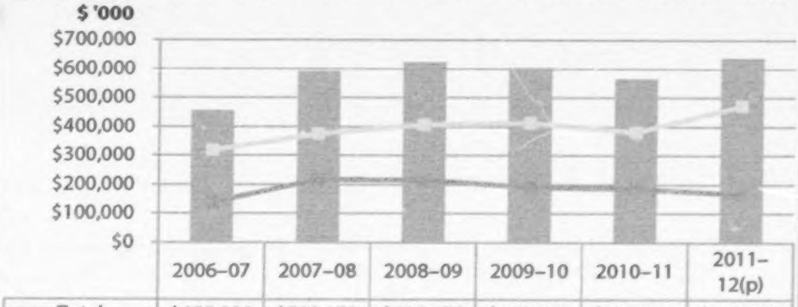
KEY QUESTIONS:

- What is the impact of increased sponsored research activity on Alberta's post-secondary system?
- What are appropriate indicators for measuring knowledge creation and transfer?

Chapter Six: Research

System Overview >>>

Total Expenditures by Activity, Government of Alberta 2006-07 to 2011-12, Preliminary



	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12(p)
▨ Total	$455,926	$592,173	$622,652	$603,951	$565,811	$638,670
Total R&D	$318,022	$374,913	$407,340	$413,148	$380,658	$471,113
Total RSA	$137,904	$217,260	$215,312	$190,803	$185,153	$167,557

Source: Statistics Canada. Scientific Activities of the Government of Alberta 2010-11 and 2011-12.

Alberta's provincially funded research and innovation system is guided by provincial government priorities as established in ministerial mandate letters, department business plans, and GOA policy documents. On behalf of the GOA, EAE has overall responsibility for the oversight and effective coordination of the provincially funded research and innovation system.

While ministries are responsible for supporting the operational research activities associated with their mandates, EAE, along with other GOA departments and Alberta Innovates corporations, is also engaged in a model of shared leadership to develop and communicate Alberta's research and innovation priorities. EAE coordinates this shared leadership model through a variety of collaborative mechanisms, including the cross-ministerial Portfolio Advisory Committee (PAC), which advises the Minister of EAE in the area of research and innovation. In addition, the PAC ministries contribute to, and are informed by, the annual *Alberta Research and Innovation Plan* (ARIP).[121] The ARIP is a core planning document produced and refined annually by EAE. The ARIP serves as a guide to convey the Alberta research and innovation system's priority themes and key outcomes as well as to provide an overview of the Alberta Innovates corporations' priority areas of focus. A key intent is to encourage alignment across the GOA, Alberta Innovates, and Campus Alberta with respect to enhancing the provincial research and innovation system to enable it to contribute to and support key outcomes.

Research Categories

Pure research involves the generation of new knowledge, must pass peer review, generally includes the involvement of graduate students, and may or may not have immediate application.

Applied research is conducted to discover new knowledge with a more identifiable and immediate practical application. This form of research tends to be more focused on the identification of practical solutions or applications. In general, applied research lends itself more readily to third-party support, including financing from the private sector, granting councils, and communities.

Scholarly activity is developmental research that is conducted in support of faculty professional development. It is supplemental to the instructional function and geared to faculty enhancement and maintenance of their knowledge base to support instruction. It is aligned with degree programs offered, and may or may not involve peer review, but does not require the support of graduate students. It may or may not involve the support of external research funding. Where appropriate, scholarly activity may be conducted in collaboration with CARIs.

Through the ARIP, three core strategies are being pursued to strengthen the research and innovation system and contribute to social, environmental, and economic benefits for Albertans. These strategies are:

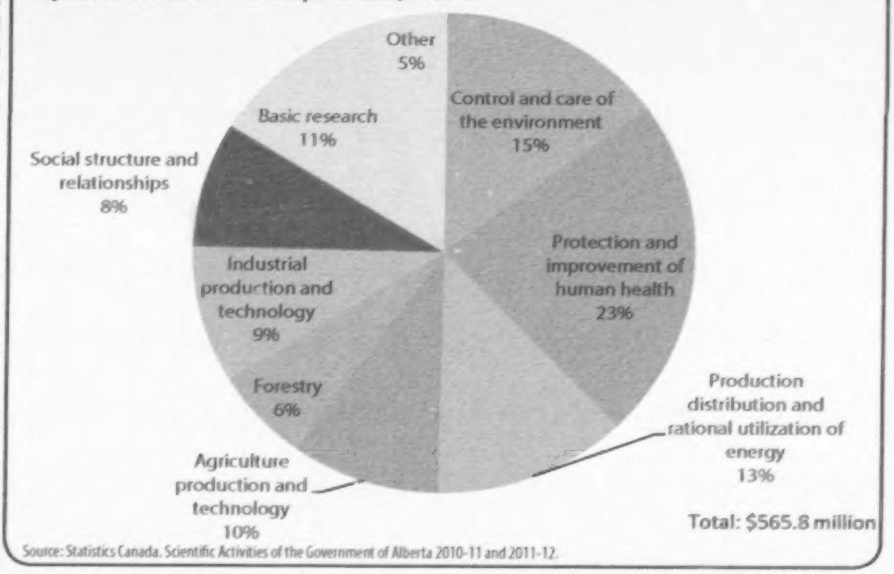
1. Building Research Capacity: Maintaining a strong base of research strengths in Alberta
2. Focusing on Targeted Areas: Strategically building on a strong base of research
3. Developing a Dynamic and Aligned Learning and Research and Innovation System: GOA, Campus Alberta, and Alberta Innovates operating as a system to advance research and innovation

The ARIP's strategies also support three key outcomes to which aligned research and innovation efforts can contribute. The key outcomes are effective resource and environmental management, a broadened economic base, and resilient, healthy communities.

Additionally, the PAC ministries, in collaboration with the Alberta Innovates corporations, developed three research themes in support of the research and innovation system's key outcomes. The themes are managing cumulative effects, developing Alberta's bioeconomy, and enabling individual/

System Overview >>>

Objectives of Total Scientific Expenditures, 2010-11



Source: Statistics Canada. Scientific Activities of the Government of Alberta 2010-11 and 2011-12.

community health and resilience. These themes have been developed to coordinate resources and efforts in common areas of focus across government ministries and Alberta Innovates corporations.

The ARIP connects the core strategies and collaborative outcomes and themes for the provincially funded research and innovation system. It is the key document that communicates provincial research and innovation direction to Campus Alberta's post-secondary institutions as a means of informing their annual research planning. The role of post-secondary institutions within Alberta's research and innovation system includes creating and sharing knowledge; attracting, retaining, and supplying highly qualified and skilled personnel; and providing solutions to industry and public interest challenges.

Based on the *Post-secondary Learning Act,*[122] the Campus Alberta system is configured into six sectors based on credentials offered, type and intensity of research activity, institutional program base in relation to the breadth of other institutions within the system, and geography served and client base. Pure and applied research is primarily conducted in the Comprehensive Academic and Research Institution (CARI) sector, while applied research and scholarly research activity may be conducted to enhance the instructional mandates of the remaining five non-CARI sectors.

Provincial Research and Innovation Investments

Investments in research and innovation fuel the process of knowledge generation and facilitate knowledge transfer, which in turn paves the path to innovation. Alberta's existing research assets are strengthened by these investments and by the coordination and alignment of research and innovation efforts among and across the PAC ministries, Alberta Innovates corporations, and Campus Alberta institutions.

The report on the scientific activities expenditure of the GOA is prepared annually by EAE in collaboration with Statistics Canada to capture reported government investments in research and innovation. There are two components measured for research and innovation: research and development (R&D), and a number of innovative activities closely related to R&D, referred to as related scientific activities (RSA).[123] Data is collected from surveys completed by GOA ministries and government entities that report scientific activity.

In 2010–11, the GOA's scientific activity expenditures amounted to $565.8 million, 6.3% less than the amount in 2009–10 ($604.0 million). R&D expenditures for 2010–11 accounted for 67.3% ($380.7 million) of the total scientific activities. RSA constituted the remaining 32.7% ($185.2 million) of the GOA total. Investments in the natural sciences accounted for 88.6% ($501.6 million) and activities in the social sciences 11.4% ($64.2 million) of Alberta's total scientific activities expenditure.

Top areas of scientific activity spending for Alberta in 2010–11 were the protection and improvement of human health ($130.2 million), the control and care of the environment ($83.6 million), and the production, distribution, and rational utilization of energy ($70.5 million).[124]

An important indicator to quantify the financial resources dedicated to science and technology is the Gross Domestic Expenditure on Research and Development (GERD). The GERD measures the total spending on R&D within a given geography. It accounts for R&D expenditure of six funding sectors—federal government, provincial government, business enterprise, higher education, non-profit organizations, and foreign investments—to produce a composite measure.

Business Enterprise Research and Development (BERD) is R&D activities conducted in Canada by the industrial (business enterprise) sector. Between 2008 and 2009, there was a decline in Alberta's BERD from $1.6 billion to $1.45 billion. By industry breakdown, the biggest decline in BERD was observed in the energy sector (oil, mining, and gas), but this sector still captures the largest percentage of business R&D activity in Alberta. The energy sector performed approximately 34.9% of total BERD in 2009.[125] Alberta's service industries performed 30.9% and its manufacturing industry 31.8%.[126]

In terms of provincial government funding, Alberta ranked third-highest funder among the provinces in 2009 with a total of $344 million in R&D expenditures, after Quebec ($423 million) and Ontario ($448 million).[127] Direct provincial government support accounts for about 12.1% of R&D funding in Alberta, which is more than double that of other provinces (except Saskatchewan, at 17.6%). Owing to variation in reporting across jurisdictions, providing a direct and accurate comparison between provincial expenditures is difficult.

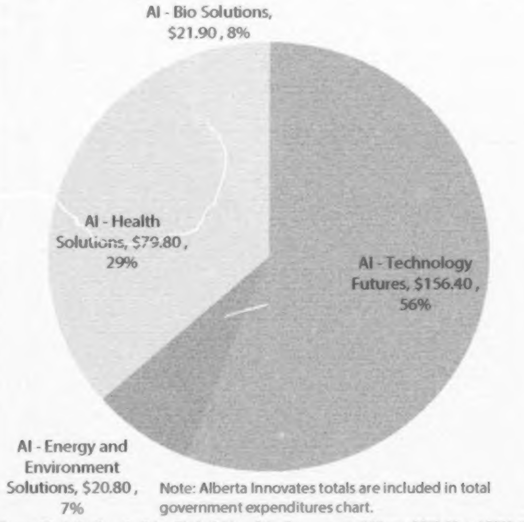
Alberta Innovates

Alberta Innovates, established in 2010, is a significant component of the provincial research and innovation investments. Alberta Innovates, consisting of the Alberta Research and Innovation Authority and four provincial corporations, is designed to strengthen the province's role as a world leader in using science to seek solutions. The four corporations that receive support from the GOA to be catalysts of innovation by building on Alberta's strengths in the bioresources, energy, and environment and health sectors are:

- Alberta Innovates – Bio Solutions
- Alberta Innovates – Energy and Environment Solutions
- Alberta Innovates – Health Solutions
- Alberta Innovates – Technology Futures

Alberta Innovates works with key innovation support agencies, publicly funded post-secondary institutions, industry, and government to invest in research and innovation and increase Alberta's competitiveness in the

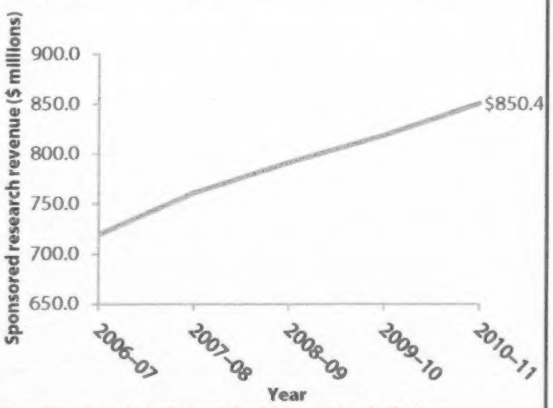
Alberta Innovates Corporations Spending on R & D and RSA (in Millions)



Note: Alberta Innovates totals are included in total government expenditures chart.

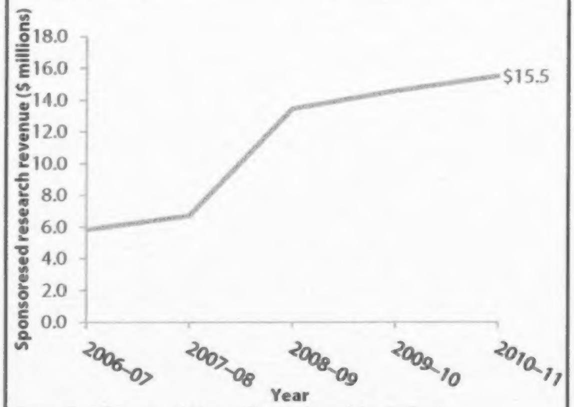
Source: Statistics Canada. Scientific Activities of the Government of Alberta 2010-11 and 2011-12.

CARI-Sponsored Research Revenues, 2006-07 to 2010-11



Source: Alberta Enterprise and Advanced Education, Research Capacity Planning.

Non-CARI-Sponsored Research Revenues, 2006-07 to 2010-11

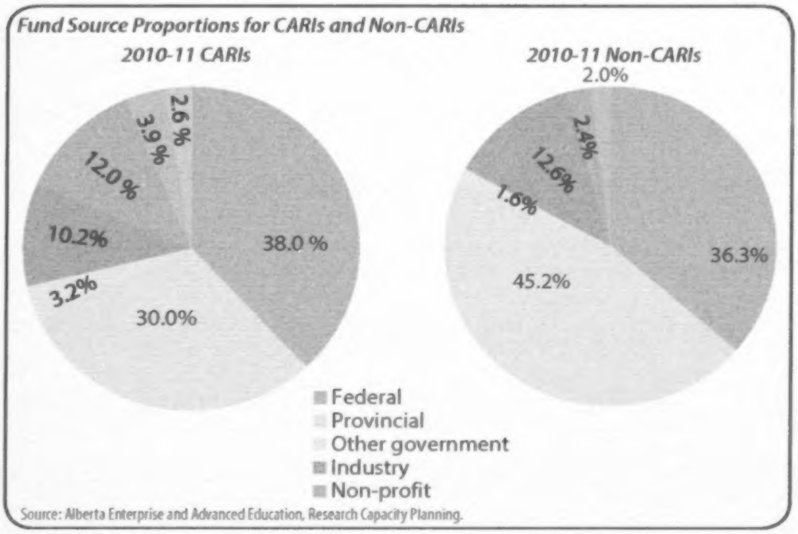


Source: Alberta Enterprise and Advanced Education, Research Capacity Planning.

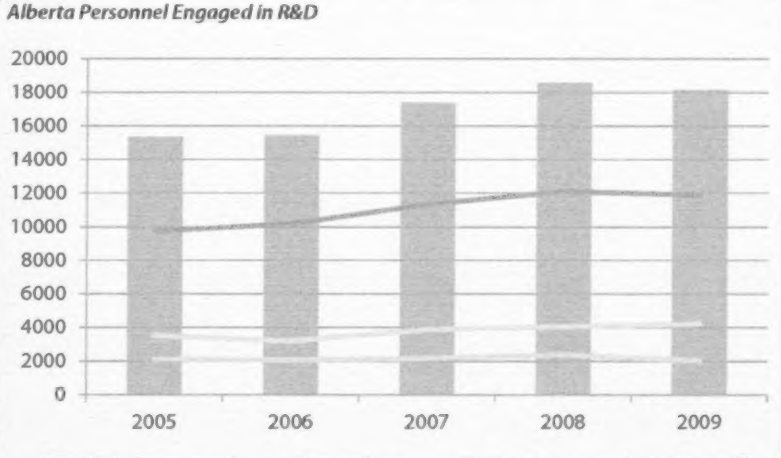
global economy. In 2010–11 Alberta Innovates corporations invested just over $278 million to support research and innovation activities that further the priorities of the Alberta research and innovation system.

Sponsored Research Revenue

Alberta's post-secondary institutions receive research funding from a variety of sources. Sponsored research revenue[128] is funding garnered outside of institutional operating grants, including contracts, grants, and donations that are used to support the operating and infrastructure costs associated with research.


Fund Source Proportions for CARIs and Non-CARIs

Source: Alberta Enterprise and Advanced Education, Research Capacity Planning.


Alberta Personnel Engaged in R&D

Source: Statistics Canada. CANSIM Table 358-0160.

CARIs attract the bulk of sponsored research funding garnered by Campus Alberta institutions—$850.4 million in 2010–11. From 2006–07 to 2010–11, total sponsored research revenue garnered by the CARI sector steadily increased by 18.2%—an indication of the sector's strength and competitiveness in attracting research funding.

Non-CARI institutions attracted about $15.5 million in 2010–11. Non-CARI institutions have seen a significant jump in sponsored research revenue in recent years, with a 6.2 % increase from 2009–10 to 2010–11. This growth in research funding is attributable to increasing applied research capacity in the non-CARI sector, one-time opportunities, and the development of federal and provincial programming. The large increase in non-CARI research revenue between 2007–08 and 2008–09 is, in part, due to enhanced reporting beginning in 2008–09.

Total research sponsorship of the four CARIs by the provincial government has increased 14%, from $223.8 million in 2006–07 to $255.3 million in 2010–11. This represents 30% of all research funding to the institutions for that year.

In 2010–11, the GoA contributed $7.0 million in research funding to non-CARI institutions, an increase of 6.7% from the previous year. At 45.2%, the province is the largest research funder to non-CARI institutions.

Highly Qualified People

Mobilization of R&D is made possible by highly qualified people who conduct research in all sectors of the economy. Statistics Canada shows that in 2009, Canada employed 234,660 personnel (researchers, technicians, and support staff) engaged in R&D in government, business-sector, higher-education, and private non-profit organizations. Most of the employed were researchers (62.4%), followed by technicians (26.0%) and support staff (11.7%). Most of the personnel engaged in R&D were in Ontario (44.4%), followed by Quebec (29.4%), British Columbia (10.7%), and Alberta (7.7%). Alberta employed 18,130 personnel engaged in R&D. About 65.5% or 11,880 were researchers, 23.3% or 4,220 were technicians, and 11.2% or 2,030 were support staff. However, these numbers showed a decline from 2008. Total personnel engaged in R&D in Canada declined by 7.6% from 253,890 in 2008, and in Alberta it declined by 2.3% from 18,560 in 2008 to 18,130 in 2009. Only Manitoba and Saskatchewan showed an increase in total personnel engaged in R&D, 7.0% and 1.6%, respectively.

Although the number of personnel engaged in R&D provides a measure of the research intensity at the input side of research activities, the outputs of research must also be explored in order to completely understand the contributions of research and innovation to the province.

Knowledge Creation and Transfer

Educated and trained people are the most important output of post-secondary institutions, but it is also important to consider how new knowledge, which includes but is not limited to basic and applied research, is used and adds value within society. The relationship between research and knowledge and

their application is complex and can occur through many formal and informal pathways. As a result, knowledge transfer, and its success and impact, are difficult to measure and quantify.[129]

Proxy measures for knowledge transfer include university start-ups, patents, and invention disclosures; however, these measures represent a small part of the overall contribution of post-secondary institutions to knowledge dissemination.

EAE will explore the potential development of knowledge transfer indicators that better reflect post-secondary institutions' contribution to the following key outcomes of Alberta's research and innovation system:

- Effective resource and environmental management
- Broadened economic base
- Resilient, healthy communities

There are several areas where improved data and information would contribute to a greater understanding of knowledge translation and diffusion processes, including:

- Entrepreneurship education and training in Alberta's post-secondary institutions
- Academic-industry agreements (knowledge sharing)
- Results of collaborative research and social and economic impact
- Employment trends and barriers in knowledge-intensive fields

Appendices

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Appendix A: Methodological Notes

Data provided are the most current available and are valid at the time of writing. Methodologies are assessed on an ongoing basis to ensure accuracy and reliability.

A1. Population Projections >>>

At the Alberta level, population data are sourced from Alberta Treasury Board and Finance based on data from Statistics Canada's 2006 Census of Population and post-census estimates of Alberta's population on July 1, 2011. The censuses, as well as the population estimates, only include the resident population. Hence, people can be a non-permanent resident (NPR) and be included in the population, but "shadow population" is not included because the primary residence for these individuals are located outside of Alberta. They are enumerated by Statistics Canada in the census as residents of other jurisdictions.

Alberta is composed of 19 Census Divisions (CDs), each containing a number of smaller Dissemination Areas (DAs). A dissemination area is a small, relatively stable geographic unit, with a population of about 400 to 700 persons. Data is available by DA for census years, and by CD for non-census years. Alberta Treasury Board and Finance calculates population forecasts by CD using a low-, medium-, and high-growth scenario. Data presented here are sourced from the medium-growth scenario, which represents the most likely case. The forecasting approach takes the base population categorized by age and by sex, and applies fertility rates, mortality rates, and migration to project the number of births, deaths, and migrants per year. These three components are either added or subtracted from the base population to obtain the population projections for the subsequent years. Provincial-level population projections are derived by summing the CD-level projections.[120]

Population forecasts by service region are derived separately from the provincial forecast. Unlike CDs, DAs fit neatly into geographic service region boundaries. Since DA-level data are only available in census years, each CD is weighted according to the proportion of its population falling in a particular service region and matched to the DAs within that region.

For example, the Medicine Hat region includes parts of three CDs (100% of CD1, 16% of CD2, and 34% of CD4). To derive the Medicine Hat region's population from these three CDs, the population of CD1 is multiplied by 1 because it contains 100% of that CD. The population of CD2 is multiplied by 0.16, and the population of CD4 by 0.34. The three derived figures are then summed to determine the overall regional population. These calculations are then forecasted forward using Alberta Treasury Board and Finance's medium-term growth scenario.

Alberta Treasury Board and Finance's 2012 set of population projections for Alberta and CDs used a different methodology than was used in previous years. The 2009 projection forecast used a ratio-based forecasting method, while the 2012 forecasts use a component-based method. The ratio-based method compares population levels and trends for a given CD to the province's to derive a ratio, and uses that ratio to project the population forward. This method is based on the assumption that there is a degree of stability in the population trends. The component method uses estimates of births, deaths, and net migration to update population figures. The various components of anticipated population change are projected separately and then applied to produce a series of population data.

The change in forecasting methodology may account for some of the variance in the population projections at the provincial and service region levels between the 2009 and 2012 forecasts.

A2. Program Bands >>>

Program bands are based on the Classification of Instructional Programs (CIP) 2000 categories. CIP 2000 is designed to classify instructional programs. Its aim is to provide a sound basis for classifying programs and support the accurate tracking, monitoring, and evaluation of programs and completions. CIP 2000 is the third revision of the original categorization.

Program bands are designed to make data analysis and the communication and presentation of data easier by categorizing CIP 2000 into nine higher-level groupings.

In collaboration with Statistics Canada, EAE reviewed CIP 2000 codes for all programs and specializations in summer 2010. Some programs and specializations' CIP codes were revised to more accurately reflect academic content. Program attributes for each program and year the program was offered now reflect values currently listed in the Program Registry System (PRS) for that year and program.

As a result of this review, some codes have been adjusted. Data provided at the CIP code or program band level may not reconcile with data presented in previous iterations. Future changes related to CIP 2000 attributes will be made on a go-forward basis, eliminating the need for future restatements.

Program Bands: Higher-Level Groupings for CIP 2000

Program band	Two-digit CIP code
Business/Management	Business, Management, Marketing and Related Support Services
Education	Education
Health Sciences	Psychology
	Health Professions and Related Clinical Sciences
	Dental, Medical and Veterinary Residency Programs
Languages, Social Sciences, Arts and Humanities	Aboriginal/Foreign Languages, Literature and Linguistics
	English Language and Literatures and Letters
	French Language and Literature and Letters
	Philosophy and Religious Studies
	History
	Social Sciences
	Library Science
	Public Administration and Social Science Profession
	Family and Consumer Science/Human Sciences
	Area, Ethnic, Cultural and Gender Studies
	Communication, Journalism and Related Programs
	Theology and Religious Vocations
	Liberal Arts, General Studies and Humanities
	Visual and Performing Arts
Legal and Security	Security and Protective Services
	Legal Profession and Studies
Recreation	Personal Awareness and Self Improvement
	Parks, Recreation, Leisure and Fitness Studies
	Leisure and Recreational Activities
Physical, Natural and Applied Sciences	Biological and Biomedical Sciences
	Agricultural, Agricultural Operations and Related
	Physical Sciences
	Mathematics and Statistics
	Engineering
	Natural Resources and Conservation
	Multi/interdisciplinary Studies
	Military Technologies
	Architecture and Related Sciences
	Computer and Information Sciences and Services
	Communication Technologies/Technicians and Support Services
Preparatory and Basic Upgrading	Basic Skills
	High School/Secondary Diplomas and Certificates
	Technology Education/Industry Arts
Trades and Technology	Construction Trades
	Mechanic and Repair Technologists/Technicians
	Precision Production
	Transportation and Materials Moving
	Engineering Technologies/Technicians
	Science Technologies/Technicians
	Personal and Culinary Services

A3. Headcount Enrolment >>>

The unduplicated (unique) student headcount measure is a method of counting enrolment that refers to the actual number of students registered at and attending a publicly funded post-secondary institution in Alberta (full- and part-time) in a given academic year.

To address the issue of double counting, the unduplicated student headcount methodology uses the Alberta Student Number (ASN), rather than the institutional student identification number, as the means of identifying students. For the past decade, institutions have used the ASN to report enrolment data to EAE via the Learner Enrolment and Reporting System (LERS). All students in Alberta should be assigned a unique ASN that travels with them, regardless of the post-secondary institutions they attend through the course of their life. As a unique identifier that travels with the learner, the ASN enables analyses that identify duplicate student counts among institutions.

In some cases, students are not assigned an ASN. For those student records without an ASN, institution-specific values were used. Because the methodology reduces double counting, subtotals and system values for this measure will not be equal to the sum of the corresponding institutional totals, as a student may have attended more than one institution; in other words, it will not be possible to add up institutional totals to arrive at a summary value, as adding each institutional total may lead to double counting. The value listed for each institution represents the unique headcount at that particular institution, while the value listed for the system total represents the number of unique headcount across the whole system.

Banff Centre Enrolments

In 2009–10, the Banff Centre began reporting enrolments using an updated full-load equivalent (FLE) calculation. Factors used for calculating headcount FLE enrolment were reviewed and adjusted for the 2009–10 academic year and moving forward. This adjustment resulted in a significantly higher FLE in 2009–10, independent of enrolments.

A4. Apprenticeship Data >>>

At a system level, registered apprentices are included in all enrolment data. Due to the nature of apprenticeship programs, where 80% of the training is provided on the job and 20% is technical training provided in class, only the in-class component is included in the enrolment data. There are also differences in how apprenticeship technical training enrolments are reflected as headcounts compared to FLEs. In terms of headcount enrolment data, apprentices are counted in the same way as everyone else (one person equals one count). In terms of FLE data, one FLE roughly equates to just under four apprentices.

While included in enrolment data, apprentices who complete their trade program and receive a journeyperson certificate are not included in LERS graduate data. This is because, unlike other post-secondary programs where the respective post-secondary institution awards the credential, apprentices receive their certification from Apprenticeship and Industry Training, EAE. Data on graduates from the Trades and Technology program band includes only those graduates from technology and technician programs, and excludes journeypersons.

Data on registered apprentices is tracked via the Apprenticeship, Trade, and Occupational Management System (ATOMS).

Apprenticeship Data in ASI

Beginning in fall 2010, apprenticeship data was no longer reported in the Applicant Submission Initiative (ASI) database. This change was made in consultation with post-secondary institutions to reflect the distinct delivery style of apprenticeship programs: whereas ASI's annual fall data submission is able to account for the majority of Campus Alberta's post-secondary applicants and applications, apprenticeship programs' multiple intakes throughout the year are best reported via ATOMS. Because all historical data has been restated to reflect this change, values may not match those previously reported. Fall 2005 and 2006 ASI data will remain unchanged, as ASI collected and reported apprenticeship information for the first time in fall 2007.

Appendix B: Data Tables

B1. High School Transitions by Service Region

REGION OF HIGH SCHOOL GRADUATION	REGION OF POST-SECONDARY TRANSITION													
Fall 2011	Calgary	Central	Edmonton	Grande Prairie	Keyano	Lakeland	Lethbridge	Medicine Hat	Northern Lakes	Portage	Athabasca University (AU)	Total (with AU)	Did not attend PSE in Alberta	Total graduates
Calgary	3,376	46	327	—	—	—	259	—	—	—	—	4,020	6,037	10,057
	78.8%	6.6%	6.9%	—	—	—	28.3%	—	—	—	—	35.1%	31.6%	32.9%
Central	181	488	159	5	—	11	92	13	—	—	—	950	1,776	2,726
	4.2%	69.5%	3.3%	2.1%	—	8.3%	10.1%	5.1%	—	—	—	8.3%	9.3%	8.9%
Edmonton	564	83	3,753	24	9	37	81	13	—	10	—	4,579	7,534	12,113
	13.2%	11.8%	79.0%	10.0%	8.9%	28.0%	8.9%	5.1%	—	19.2%	—	40.0%	39.4%	39.6%
Grande Prairie	28	14	93	173	—	5	8	—	—	—	—	324	755	1,079
	0.7%	2.0%	2.0%	72.4%	—	3.8%	0.9%	—	—	—	—	2.8%	3.9%	3.5%
Keyano	16	—	38	—	90	—	5	—	—	—	—	155	311	466
	0.4%	—	0.8%	—	89.1%	—	0.5%	—	—	—	—	1.4%	1.6%	1.5%
Lakeland	5	21	82	—	—	52	7	—	—	—	—	171	249	420
	0.1%	3.0%	1.7%	—	—	39.4%	0.8%	—	—	—	—	1.5%	1.3%	1.4%
Lethbridge	50	17	49	—	—	5	401	12	—	—	—	535	918	1,453
	1.2%	2.4%	1.0%	—	—	3.8%	43.8%	4.7%	—	—	—	4.7%	4.8%	4.8%
Medicine Hat	56	12	32	—	—	—	52	209	—	—	—	362	584	946
	1.3%	1.7%	0.7%	—	—	—	5.7%	82.0%	—	—	—	3.2%	3.1%	3.1%
Northern Lakes	5	7	78	33	—	—	6	—	12	—	—	144	508	652
	0.1%	1.0%	1.6%	13.8%	—	—	0.7%	—	66.7%	—	—	1.3%	2.7%	2.1%
Portage	—	11	141	—	—	12	—	—	—	40	—	214	446	660
	—	1.6%	3.0%	—	—	9.1%	—	—	—	76.9%	—	1.9%	2.3%	2.2%
Alberta TOTAL	4,285	702	4,752	239	101	132	915	255	18	52	3	11,454	19,118	30,572
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes:

Values less than five have been suppressed and are indicated by (--). Row totals may not equal the sum of all columns due to suppression.

Data include only those high school students who transition directly to PSE upon graduation. The number of high school graduates may be understated, as these only represent a snapshot of fall enrolments and may not include those graduates entering apprenticeship programs or those who have a continuous intake.

Source: Alberta Enterprise and Advanced Education, Application Submission Initiative (ASI), Alberta Education.

B2. Historical Applicants

	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011
Comprehensive Academic and Research Institutions	111,214	73,240	75,829	80,859	84,381
Athabasca University[1]	55,714	17,458	16,905	20,850	22,639
University of Alberta	33,237	32,581	33,097	34,485	35,459
University of Calgary	23,455	23,361	25,878	26,233	27,313
University of Lethbridge	6,286	5,902	6,102	6,044	6,105
Baccalaureate and Applied Studies Institutions	24,784	25,281	27,905	28,035	28,268
Grant MacEwan University[2]	13,051	13,174	14,652	14,721	15,397
Mount Royal University[2]	12,035	12,403	13,551	13,628	13,230
Polytechnical Institutions	20,881	21,558	23,602	24,547	25,758
Northern Alberta Institute of Technology	10,261	10,690	11,604	12,379	12,904
Southern Alberta Institute of Technology	11,258	11,548	12,627	12,883	13,696
Comprehensive Community Institutions	22,922	24,378	28,584	29,543	28,452
Bow Valley College	3,932	3,317	4,360	4,980	4,907
Grande Prairie Regional College	1,646	1,287	2,554	2,452	2,601
Keyano College	562	957	1,027	750	982
Lakeland College	1,586	1,879	1,869	2,275	2,096
Lethbridge College	3,484	3,431	3,719	3,874	3,892
Medicine Hat College	2,282	2,372	2,556	2,466	2,305
NorQuest College[3]	1,711	3,203	3,546	4,027	3,423
Northern Lakes College	1,359	1,442	1,485	1,652	1,660
Olds College	1,409	1,625	1,511	1,786	1,697
Portage College	1,541	1,595	1,979	1,843	1,562
Red Deer College	4,260	4,237	5,032	4,529	4,494
Independent Academic Institutions	2,931	2,886	2,840	2,695	2,742
Ambrose University College[4]	215	235	296	307	339
Canadian University College	328	422	240	279	328
Concordia University College of Alberta	1,497	1,360	1,422	1,278	1,210
King's University College	495	571	587	486	521
St. Mary's University College	361	248	366	405	414
Taylor University College and Seminary[5]	99	112	n/a	n/a	n/a
Specialized Arts and Culture Institutions	754	802	1,000	911	847
Alberta College of Art and Design	754	802	1,000	911	847
TOTAL	169,288	134,792	145,341	151,358	154,223

Notes:

1. Prior to 2008, Athabasca University reported all applicants at the course level. From 2008 onward, Athabasca University reports new applicants or those applying to a new program.
2. In 2009, the Lieutenant Governor in Council changed the name of Grant MacEwan College and Mount Royal College to Grant MacEwan University and Mount Royal University.
3. In 2008, NorQuest updated its process to include applications/applicants for programs that were excluded in previous years.
4. In 2007, Alliance University College and Canadian Nazarene University College merged to become Ambrose University College.
5. In 2009, Taylor University College and Seminary ceased offering undergraduate programs and was renamed Taylor College and Seminary.

The sum of the rows will not equal the system total, as students may have applied to more than one institution.
In 2010, all apprenticeship records were removed from ASI. All historical values have been restated to reflect this change.
Data for the Banff Centre are unavailable, as it does not report via ASI.

Source: Alberta Enterprise and Advanced Education, Application Submission Initiative (ASI).

B3. Applicant Trends - Coming From (Alberta)

		WHERE STUDENTS APPLYING TO												
	Fall 2011	Calgary	Central	Edmonton	Grande Prairie	Keyano	Lakeland	Lethbridge	Medicine Hat	Northern Lakes	Portage	All Regions (without AU)	Athabasca University (AU)	Total (with AU)
WHERE STUDENTS APPLYING FROM	Calgary	35,890	719	4,022	33	12	68	2,378	117	15	27	39,501	3,096	42,358
		90.9%	1.8%	10.2%	0.1%	0.0%	0.2%	6.0%	0.3%	0.0%	0.1%	100.0%	7.3%	100.0%
	Central	1,699	3,364	1,843	38	9	78	483	74	11	20	6,610	482	6,971
		25.7%	50.9%	27.9%	0.6%	0.1%	1.2%	7.3%	1.1%	0.2%	0.3%	100.0%	6.9%	100.0%
	Edmonton	2,203	631	33,342	122	17	274	471	52	96	113	35,843	2,763	38,176
		6.1%	1.8%	93.0%	0.3%	0.0%	0.8%	1.3%	0.1%	0.3%	0.3%	100.0%	7.2%	100.0%
	Grande Prairie	385	135	1,085	1,577	2	37	85	6	177	16	2,618	309	3,293
		14.7%	5.2%	41.4%	60.2%	0.1%	1.4%	3.2%	0.2%	6.8%	0.6%	100.0%	9.4%	100.0%
	Keyano	252	32	580	20	900	21	60	9	8	33	1,610	207	1,861
		15.7%	2.0%	36.0%	1.2%	55.9%	1.3%	3.7%	0.6%	0.5%	2.0%	100.0%	11.1%	100.0%
	Lakeland	156	117	693	5	0	481	62	14	1	35	1,335	155	1,451
		11.7%	8.8%	51.9%	0.4%	0.0%	36.0%	4.6%	1.0%	0.1%	2.6%	100.0%	10.7%	100.0%
	Lethbridge	732	106	578	2	1	31	3,356	63	4	8	4,457	275	4,678
		16.4%	2.4%	13.0%	0.0%	0.0%	0.7%	75.3%	1.4%	0.1%	0.2%	100.0%	5.9%	100.0%
	Medicine Hat	589	89	376	4	4	18	354	1,347	4	5	2,383	215	2,604
		24.7%	3.7%	15.8%	0.2%	0.2%	0.8%	14.9%	56.5%	0.2%	0.2%	100.0%	8.3%	100.0%
	Northern Lakes	129	84	764	254	4	30	37	11	1,232	120	2,384	177	2,562
		5.4%	3.5%	32.0%	10.7%	0.2%	1.3%	1.6%	0.5%	51.7%	5.0%	100.0%	6.9%	100.0%
	Portage	137	87	903	13	2	158	55	7	31	1,028	2,082	197	2,363
		6.6%	4.2%	43.4%	0.6%	0.1%	7.6%	2.6%	0.3%	1.5%	49.4%	100.0%	8.3%	100.0%
	Alberta Unknown	45	16	88	4	6	8	15	6	6	8	1,047	11	211
		4.3%	1.5%	8.4%	0.4%	0.6%	0.8%	1.4%	0.6%	0.6%	0.8%	100.0%	5.2%	100.0%
	Alberta TOTAL	42,146	5,378	44,149	2,072	957	1,204	7,339	1,706	1,583	1,413	99,298	7,887	105,924
		42.4%	5.4%	44.5%	2.1%	1.0%	1.2%	7.4%	1.7%	1.6%	1.4%	100.0%	7.4%	100.0%

Notes:

Applicants' home region is based on the postal code derived from their post-secondary application forms. Institutions are grouped into service regions based on the location of the institution's main campus location.

The sum of the rows will not equal the totals listed, as students may have applied to more than one institution. Values in the tables represent the number of unique applicants at the level the table indicates. Students may apply to more than one institution/region. These students will threfore be counted in each column (row) that they appear in; however, they will only be counted once in the Summary columns (rows). Table does not include the Banff Centre.

Source: Alberta Enterprise and Advanced Education, Application Submission Initiative (ASI).

B4. Applicant Trends – Coming From (All)

REGION OF HIGH SCHOOL GRADUATION

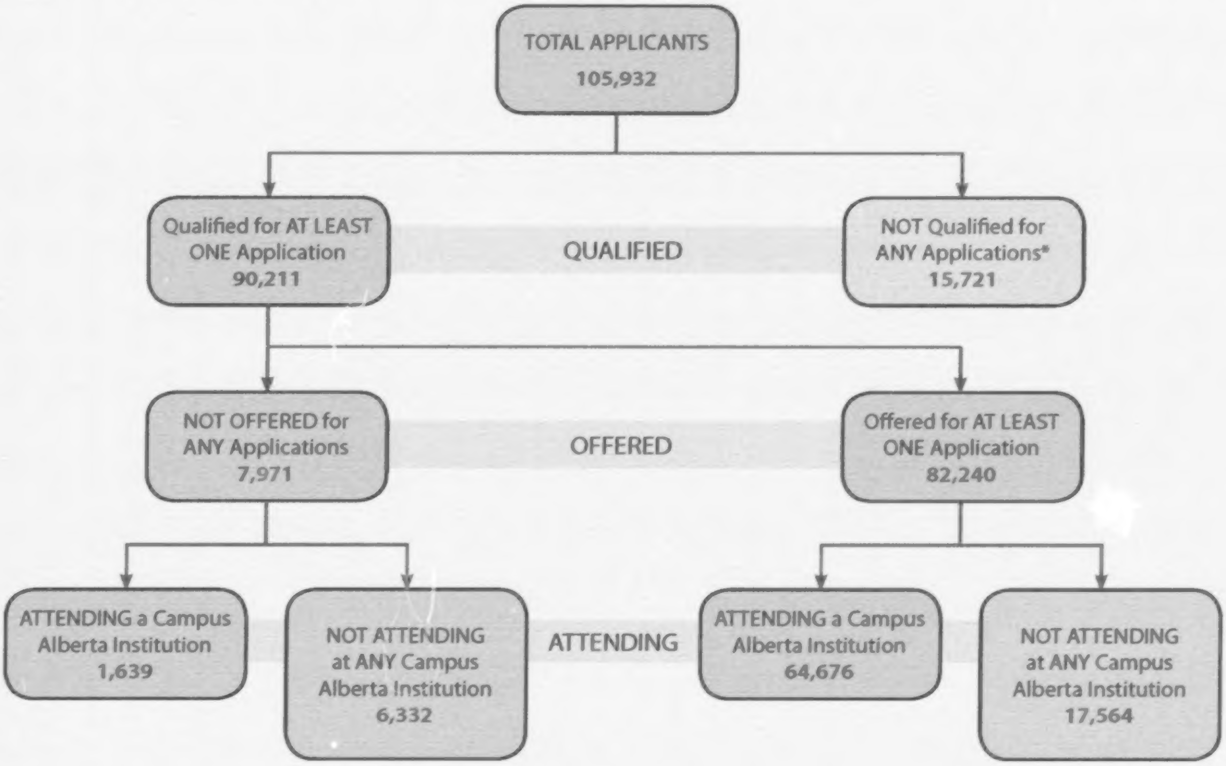
	WHERE STUDENTS APPLYING TO												
Fall 2011	Calgary	Central	Edmonton	Grande Prairie	Keyano	Lakeland	Lethbridge	Medicine Hat	Northern Lakes	Portage	All Regions (without AU)	Athabasca University (AU)	Total (with AU)
Alberta	42,146	5,378	44,149	2,072	957	1,204	7,339	1,706	1,583	1,413	99,298	7,887	105,924
	42.4%	5.4%	44.5%	2.1%	1.0%	1.2%	7.4%	1.7%	1.6%	1.4%	100.0%	7.4%	100.0%
British Columbia	3,632	275	3,345	213	2	46	429	33	14	10	7,149	1,902	9,009
	50.8%	3.8%	46.8%	3.0%	0.0%	0.6%	6.0%	0.5%	0.2%	0.1%	100.0%	21.1%	100.0%
Manitoba	360	49	389	9	0	54	103	23	1	6	924	643	1,562
	39.0%	5.3%	42.1%	1.0%	0.0%	5.8%	11.1%	2.5%	0.1%	0.6%	100.0%	41.2%	100.0%
New Brunswick	93	12	114	5	2	2	11	0	1	2	233	428	660
	39.9%	5.2%	48.9%	2.1%	0.9%	0.9%	4.7%	0.0%	0.4%	0.9%	100.0%	64.8%	100.0%
Newfoundland and Labrador	88	8	141	6	1	4	6	2	3	0	243	222	465
	36.2%	3.3%	58.0%	2.5%	0.4%	1.6%	2.5%	0.8%	1.2%	0.0%	100.0%	47.7%	100.0%
Northwest Territories	194	46	370	162	2	4	70	3	13	13	728	239	961
	26.6%	6.3%	50.8%	22.3%	0.3%	0.5%	9.6%	0.4%	1.8%	1.8%	100.0%	24.9%	100.0%
Nova Scotia	210	23	229	9	0	7	42	3	2	0	498	736	1,229
	42.2%	4.6%	46.0%	1.8%	0.0%	1.4%	8.4%	0.6%	0.4%	0.0%	100.0%	59.9%	100.0%
Nunavut and Yukon Territories	104	13	106	15	1	0	35	1	0	1	234	61	295
	44.4%	5.6%	45.3%	6.4%	0.4%	0.0%	15.0%	0.4%	0.0%	0.4%	100.0%	20.7%	100.0%
Ontario	2,328	185	2,239	22	7	59	258	28	4	15	4,608	8,336	12,894
	50.5%	4.0%	48.6%	0.5%	0.2%	1.3%	5.6%	0.6%	0.1%	0.3%	100.0%	64.7%	100.0%
Prince Edward Island	49	7	34	1	0	0	7	0	0	0	94	97	191
	52.1%	7.4%	36.2%	1.1%	0.0%	0.0%	7.4%	0.0%	0.0%	0.0%	100.0%	50.8%	100.0%
Quebec	197	17	187	4	1	1	10	3	0	3	403	405	807
	48.9%	4.2%	46.4%	1.0%	0.2%	0.2%	2.5%	0.7%	0.0%	0.7%	100.0%	50.2%	100.0%
Saskatchewan	838	214	1,116	14	8	683	400	295	9	83	3,291	1,064	4,327
	25.5%	6.5%	33.9%	0.4%	0.2%	20.8%	12.2%	9.0%	0.3%	2.5%	100.0%	24.6%	100.0%
Canada Unknown	82	68	791	18	0	16	33	0	21	8	1,036	187	1,223
	7.9%	6.6%	76.4%	1.7%	0.0%	1.5%	3.2%	0.0%	2.0%	0.8%	100.0%	15.3%	100.0%
Canada (excluding Alberta)	8,172	917	9,054	478	24	876	1,403	391	68	141	19,396	14,320	33,575
	42.1%	4.7%	46.7%	2.5%	0.1%	4.5%	7.2%	2.0%	0.4%	0.7%	100.0%	42.7%	100.0%
Outside Canada	4,163	92	10,371	47	1	7	[illegible]	208	11	6	14,738	432	15,167
	28.2%	0.6%	70.4%	0.3%	0.0%	0.0%	4.8%	1.4%	0.1%	0.0%	100.0%	2.8%	100.0%
Other/Unknown/ Not Reported	486	78	336	4	0	10	58	0	0	2	927	0	927
	52.4%	8.4%	36.2%	0.4%	0.0%	1.1%	6.3%	0.0%	0.0%	0.2%	100.0%	0.0%	100.0%
ALL SERVICE AREAS	54,822	6,463	63,444	2,601	982	2,096	9,491	2,305	1,660	1,562	133,089	22,639	154,223
	41.2%	4.9%	47.7%	2.0%	0.7%	1.6%	7.1%	1.7%	1.2%	1.2%	100.0%	14.7%	100.0%

Notes:
Applicants' home region is based on the postal code derived from their post-secondary application forms. Institutions are grouped into service regions based on the location of the institution's main campus location.
The sum of the rows will not equal the totals listed, as students may have applied to more than one institution. Values in the tables represent the number of unique applicants at the level the table indicates. Students may apply to more than one institution/region. These students will therefore be counted in each column (row) that they appear in; however, they will only be counted once in the Summary columns (rows). Table does not include the Banff Centre.

Source: Alberta Enterprise and Advanced Education, Application Submission Initiative (ASI).

B5. Turn-Away Flow Chart (Albertans)

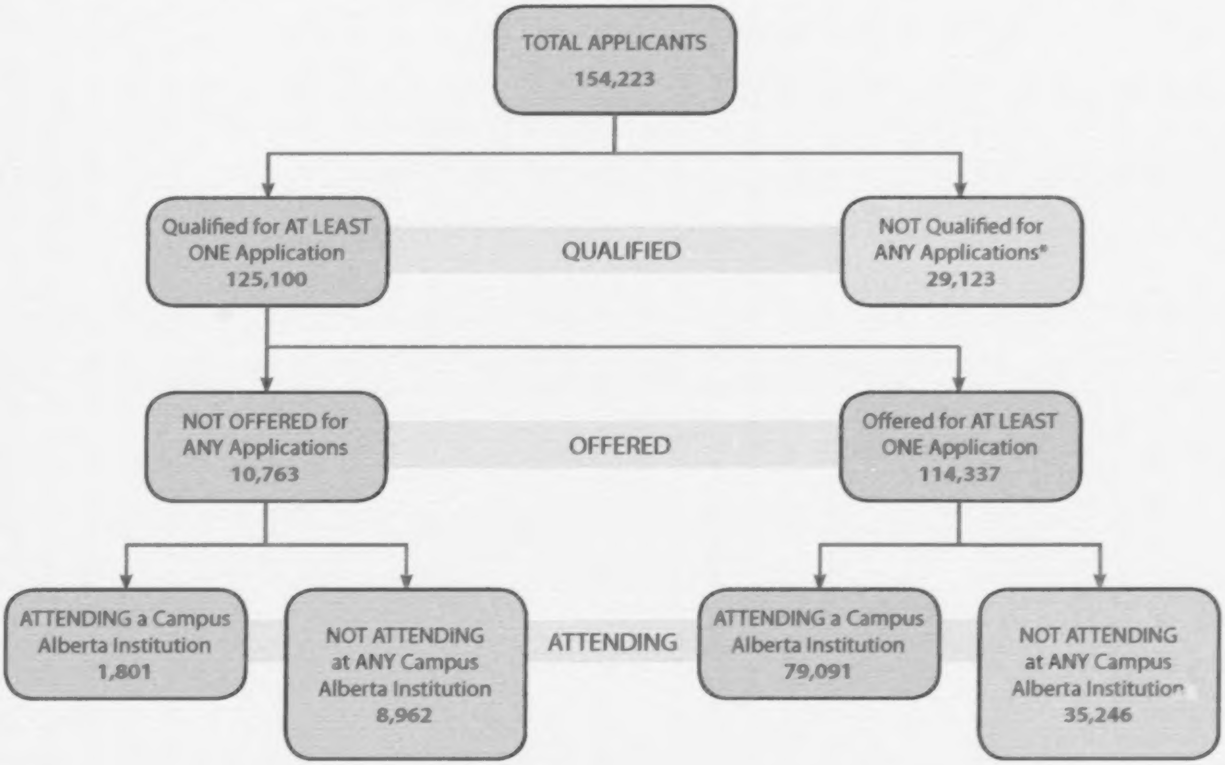
System Level Turn-aways (Albertans), Fall 2011


TOTAL APPLICANTS
105,932
Qualified for AT LEAST ONE Application
90,211
QUALIFIED
NOT Qualified for ANY Applications*
15,721
NOT OFFERED for ANY Applications
7,971
OFFERED
Offered for AT LEAST ONE Application
82,240
ATTENDING a Campus Alberta Institution
1,639
NOT ATTENDING at ANY Campus Alberta Institution
6,332
ATTENDING
ATTENDING a Campus Alberta Institution
64,676
NOT ATTENDING at ANY Campus Alberta Institution
17,564

Notes:
*Data may also include applicants who had incomplete or non-processed applications.
Applicants were categorized as Albertan based on their place of residence (postal code) at the time of application.
Data do not include the Banff Centre, as it does not report via ASI.
Source: Alberta Enterprise and Advanced Education, Application Submission Initiative (ASI).

B6. Turn-Away Flow Chart (All)

System Level Turn-aways (All), Fall 2011


TOTAL APPLICANTS
154,223
Qualified for AT LEAST ONE Application
125,100
QUALIFIED
NOT Qualified for ANY Applications*
29,123
NOT OFFERED for ANY Applications
10,763
OFFERED
Offered for AT LEAST ONE Application
114,337
ATTENDING a Campus Alberta Institution
1,801
NOT ATTENDING at ANY Campus Alberta Institution
8,962
ATTENDING
ATTENDING a Campus Alberta Institution
79,091
NOT ATTENDING at ANY Campus Alberta Institution
35,246

Notes:
*Data may also include applicants who had incomplete or non-processed applications.
Applicants were categorized as Albertan based on their place of residence (postal code) at the time of application.
Data do not include the Banff Centre, as it does not report via ASI.
Source: Alberta Enterprise and Advanced Education, Application Submission Initiative (ASI).

B7. Historical Enrolment (FLE)

	2006-07	2007-08	2008-09	2009-10	2010-11
Comprehensive Academic and Research Institutions	70,514.3	70,469.1	71,442.3	74,523.3	76,354.8
Athabasca University	7,183.7	7,193.3	7,525.9	7,701.3	7,892.1
University of Alberta	32,337.6	32,683.9	32,844.0	33,886.1	34,553.7
University of Calgary	24,044.4	23,654.3	24,383.6	26,024.8	26,859.3
University of Lethbridge	6,948.7	6,937.6	6,688.7	6,911.1	7,049.7
Baccalaureate and Applied Studies Institutions	17,835.9	18,082.0	19,176.9	20,827.3	21,736.5
Grant MacEwan University[1]	10,338.9	10,204.7	10,220.9	11,156.7	11,742.4
Mount Royal University[1,2]	7,497.1	7,877.3	8,956.0	9,670.6	9,994.1
Polytechnical Institutions	23,861.2	24,589.3	25,401.3	24,831.4	25,354.3
Northern Alberta Institute of Technology	12,273.7	12,979.7	13,582.9	13,185.6	13,493.5
Southern Alberta Institute of Technology	11,587.5	11,609.6	11,818.4	11,645.8	11,860.8
Comprehensive Community Institutions	24,501.9	25,140.8	26,591.6	29,781.2	28,483.0
Bow Valley College	3,456.8	3,590.6	3,825.0	4,463.8	4,492.5
Grande Prairie Regional College	1,262.4	1,251.1	1,289.8	2,069.3	2,013.8
Keyano College	1,223.4	1,290.2	1,212.4	1,353.1	1,414.7
Lakeland College	1,778.2	1,928.0	2,051.1	2,098.8	2,249.8
Lethbridge College	3,726.3	3,669.1	3,815.2	4,123.3	3,972.4
Medicine Hat College	2,365.7	2,347.1	2,312.6	2,537.4	2,547.5
NorQuest College	4,022.8	4,365.2	5,084.4	5,680.7	4,515.2
Northern Lakes College	777.9	860.4	1,020.2	1,059.6	1,088.1
Olds College	1,309.0	1,274.9	1,270.9	1,294.5	1,258.2
Portage College	979.5	910.8	979.6	1,099.3	989.9
Red Deer College	3,600.1	3,653.2	3,730.2	4,001.6	3,940.9
Independent Academic Institutions	3,025.3	2,976.4	2,842.8	2,954.1	3,043.3
Alliance University College[3]	124.3	n/a	n/a	n/a	n/a
Ambrose University College[3]	n/a	316.8	303.4	345.8	370.6
Canadian Nazarene University College[3]	192.3	n/a	n/a	n/a	n/a
Canadian University College	314.3	287.0	284.7	333.0	409.9
Concordia University College of Alberta	1,431.3	1,424.2	1,297.8	1,336.8	1,301.3
King's University College	472.8	472.4	504.3	560.1	557.5
St. Mary's University College	348.1	347.4	337.2	378.5	404.0
Taylor University College and Seminary[4]	142.4	128.6	115.3	n/a	n/a
Specialized Arts and Culture Institutions	1,317.6	1,312.6	1,354.1	1,544.5	1,556.0
Alberta College of Art and Design	962.8	971.9	985.0	999.2	1,003.4
The Banff Centre	354.8	340.7	369.1	545.4	552.7
TOTAL	141,056.3	142,570.1	146,808.9	154,461.9	156,527.9

Notes:

1. In 2009, the Lieutenant Governor in Council changed the names of Grant MacEwan College and Mount Royal College to Grant MacEwan University and Mount Royal University.
2. 2008-09 was the first year Mount Royal reported enrolments in English language (ESL) training and academic upgrading.
3. In 2007, Alliance University College merged with Canadian Nazarene University College to become Ambrose University College.
4. As of June 30, 2009, Taylor University College and Seminary ceased offering undergraduate programs and was renamed Taylor College and Seminary.

Source: Alberta Enterprise and Advanced Education, Learner and Enrolment Reporting System (LERS).

B8. Historical Enrolment (Headcount)

	2006-07	2007-08	2008-09	2009-10	2010-11
Comprehensive Academic and Research Institutions	114,865	115,272	116,287	119,217	121,208
Athabasca University	37,219	37,876	38,543	38,333	38,937
University of Alberta	40,094	40,364	40,245	41,331	41,988
University of Calgary	30,905	30,510	30,761	32,533	33,230
University of Lethbridge	9,385	9,232	8,771	9,108	9,360
Baccalaureate and Applied Studies Institutions	29,129	29,484	32,836	34,482	35,082
Grant MacEwan University[1]	17,080	16,833	17,671	18,379	19,143
Mount Royal University[1,2]	12,060	12,674	15,187	16,121	15,967
Polytechnical Institutions	55,162	56,911	58,005	53,904	53,402
Northern Alberta Institute of Technology	26,549	28,345	29,455	27,545	27,871
Southern Alberta Institute of Technology	28,682	28,655	28,632	26,427	25,600
Comprehensive Community Institutions	52,870	53,247	53,904	56,721	56,758
Bow Valley College	8,264	8,111	8,228	8,599	8,830
Grande Prairie Regional College	2,229	2,298	2,249	3,965	3,800
Keyano College	2,446	2,537	2,658	2,866	2,932
Lakeland College	6,862	8,067	7,713	7,386	7,925
Lethbridge College	6,349	6,311	6,434	6,617	6,512
Medicine Hat College	5,751	5,570	5,255	5,250	5,408
NorQuest College	7,483	6,692	7,408	8,398	7,444
Northern Lakes College	1,401	1,565	1,734	1,709	1,752
Olds College	3,468	3,127	2,761	2,464	2,428
Portage College	2,808	2,773	3,062	2,974	3,585
Red Deer College	6,770	7,059	7,269	7,300	7,031
Independent Academic Institutions	4,386	4,270	4,034	4,216	4,258
Alliance University College[3]	452	n/a	n/a	n/a	n/a
Ambrose University College[3]	n/a	505	477	575	581
Canadian Nazarene University College[3]	476	n/a	n/a	n/a	n/a
Canadian University College	453	426	440	476	567
Concordia University College of Alberta	2,032	1,949	1,787	1,878	1,774
King's University College	634	650	678	731	717
St. Mary's University College	578	556	509	572	627
Taylor University College and Seminary[4]	213	203	158	n/a	n/a
Specialized Arts and Culture Institutions	4,703	5,098	5,421	4,673	5,038
Alberta College of Art and Design	1,268	1,316	1,324	1,319	1,314
The Banff Centre	3,435	3,782	4,097	3,354	3,724
TOTAL	254,460	257,655	264,291	267,373	269,993

Notes:

1. In 2009, the Lieutenant Governor in Council changed the names of Grant MacEwan College and Mount Royal College to Grant MacEwan University and Mount Royal University.
2. 2008-09 was the first year Mount Royal reported enrolments in English language (ESL) training and academic upgrading.
3. In 2007, Alliance University College merged with Canadian Nazarene University College to become Ambrose University College.
4. As of June 30, 2009, Taylor University College and Seminary ceased offering undergraduate programs and was renamed Taylor College and Seminary.

Source: Alberta Enterprise and Advanced Education, Learner and Enrolment Reporting System (LERS).

B9. Historical Aboriginal Enrolment (Headcount)

	2007-08		2008-09		2009-10		2010-11	
	Aboriginal enrolment	% of total enrolment	Aboriginal enrolment	% of total enrolment	Aboriginal enrolment	% of total enrolment	Aboriginal enrolment	% of total enrolment
Comprehensive Academic and Research Institutions	2,822	2.4%	3,027	2.6%	2,668	2.2%	3,152	2.6%
Athabasca University	906	2.4%	991	2.6%	931	2.4%	1,017	2.6%
University of Alberta	1,118	2.8%	1,197	3.0%	816	2.0%	1,131	2.7%
University of Calgary	358	1.2%	433	1.4%	508	1.6%	582	1.8%
University of Lethbridge	483	5.2%	443	5.1%	450	4.9%	469	5.0%
Baccalaureate and Applied Studies Institutions	776	2.6%	1,018	3.1%	1,184	3.4%	1,221	3.5%
Grant MacEwan University[1]	400	2.4%	561	3.2%	680	3.7%	666	3.5%
Mount Royal University[1,2]	376	3.0%	457	3.0%	504	3.1%	556	3.5%
Polytechnical Institutions	262	0.5%	295	0.5%	344	0.6%	1,060	2.0%
Northern Alberta Institute of Technology	147	0.5%	195	0.7%	203	0.7%	729	2.6%
Southern Alberta Institute of Technology	115	0.4%	100	0.3%	141	0.5%	332	1.3%
Comprehensive Community Institutions	3,613	6.8%	3,989	7.4%	3,990	7.0%	4,374	7.7%
Bow Valley College	116	1.4%	148	1.8%	9	0.1%	253	2.9%
Grande Prairie Regional College	277	12.1%	304	13.5%	492	12.4%	493	13.0%
Keyano College	369	14.5%	312	11.7%	377	13.2%	400	13.6%
Lakeland College	177	2.2%	273	3.5%	242	3.3%	360	4.5%
Lethbridge College	349	5.5%	326	5.1%	308	4.7%	328	5.0%
Medicine Hat College	131	2.4%	28	0.5%	19	0.4%	17	0.3%
NorQuest College	656	9.8%	796	10.7%	729	8.7%	665	8.9%
Northern Lakes College	660	42.2%	730	42.1%	757	44.3%	811	46.3%
Olds College	33	1.1%	71	2.6%	37	1.5%	51	2.1%
Portage College	782	28.2%	940	30.7%	957	32.2%	867	24.2%
Red Deer College	103	1.5%	104	1.4%	114	1.6%	179	2.5%
Independent Academic Institutions	90	2.1%	88	2.2%	109	2.6%	123	2.9%
Ambrose University College[3]	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Canadian University College	7	1.6%	10	2.3%	11	2.3%	12	2.1%
Concordia University College of Alberta	71	3.6%	64	3.6%	80	4.3%	90	5.1%
King's University College	9	1.4%	14	2.1%	18	2.5%	15	2.1%
St. Mary's University College	3	0.5%	0	0.0%	0	0.0%	6	1.0%
Taylor University College and Seminary[4]	0	0.0%	0	0.0%	n/a	n/a	n/a	n/a
Specialized Arts and Culture Institutions	29	2.2%	34	2.6%	45	3.4%	50	3.8%
Alberta College of Art and Design	29	2.2%	34	2.6%	45	3.4%	50	3.8%
TOTAL	7,511	3.0%	8,355	3.2%	8,254	3.1%	9,885	3.7%

Notes:

1. In 2009, the Lieutenant Governor in Council changed the names of Grant MacEwan College and Mount Royal College to Grant MacEwan University and Mount Royal University.
2. 2008-09 was the first year that Mount Royal reported enrolment in English language (ESL) training and academic upgrading.
3. In 2007, Alliance University College and Canadian Nazarene University College merged to become Ambrose University College.
4. As of June 30, 2009, Taylor University College and Seminary became Taylor College and Seminary, ceasing to offer undergraduate academic baccalaureate programs.

Aboriginal students self-identify via a check box on post-secondary application forms. Data may underestimate the actual number of Aboriginal learners.
Data for the Banff Centre are unavailable, as it does not report through LERS.
Values represent unique students; therefore, the sum of the rows will not equal the total listed, as some students may attend more than one institution.

Source: Alberta Enterprise and Advanced Education, Learner and Enrolment Reporting System (LERS).

B10. Historical Visa Student Enrolment (Headcount)

	2007-08		2008-09		2009-10		2010-11	
	Visa enrolment	% of total enrolment	Visa enrolment	% of total enrolment	Visa enrolment	% of total enrolment	Visa enrolment	% of total enrolment
Comprehensive Academic and Research Institutions	6,051	7.6%	6,701	8.4%	7,675	9.3%	8,131	9.6%
University of Alberta	3,359	8.3%	3,794	9.4%	4,440	10.7%	5,050	12.0%
University of Calgary	1,999	6.6%	2,328	7.6%	2,677	8.2%	2,545	7.7%
University of Lethbridge	706	7.6%	584	6.7%	563	6.2%	547	5.9%
Baccalaureate and Applied Studies Institutions	721	2.4%	1,581	4.8%	1,557	4.5%	1,657	4.7%
Grant MacEwan University[1]	369	2.2%	642	3.6%	727	4.0%	894	4.7%
Mount Royal University[1,2]	352	2.8%	939	6.2%	830	5.1%	763	4.8%
Polytechnical Institutions	1,689	3.0%	1,902	3.3%	1,803	3.3%	1,917	3.6%
Northern Alberta Institute of Technology	1,108	3.9%	1,142	3.9%	1,016	3.7%	1,154	4.1%
Southern Alberta Institute of Technology	584	2.0%	761	2.7%	787	3.0%	766	3.0%
Comprehensive Community Institutions	1,177	2.2%	1,514	2.8%	1,431	2.5%	1,296	2.3%
Bow Valley College	410	5.1%	397	4.8%	384	4.5%	406	4.6%
Grande Prairie Regional College	47	2.0%	58	2.6%	61	1.5%	45	1.2%
Keyano College	25	1.0%	23	0.9%	41	1.4%	49	1.7%
Lakeland College	–	–	6	0.1%	5	0.1%	6	0.1%
Lethbridge College	217	3.4%	197	3.1%	236	3.6%	322	4.9%
Medicine Hat College	197	3.5%	207	3.9%	198	3.8%	269	5.0%
NorQuest College	112	1.7%	495	6.7%	395	4.7%	88	1.2%
Northern Lakes College	–	–	–	–	–	–	–	–
Olds College	104	3.3%	75	2.7%	54	2.2%	53	2.2%
Portage College	–	–	–	–	17	0.6%	–	–
Red Deer College	61	0.9%	55	0.8%	46	0.6%	57	0.8%
Independent Academic Institutions	190	4.4%	203	5.0%	189	4.5%	198	4.7%
Ambrose University College[3]	10	2.0%	17	3.6%	5	0.9%	20	3.4%
Canadian University College	75	17.6%	76	17.3%	70	14.7%	63	11.1%
Concordia University College of Alberta	52	2.7%	49	2.7%	59	3.1%	56	3.2%
King's University College	41	6.3%	44	6.5%	45	6.2%	46	6.4%
St. Mary's University College	11	2.0%	5	1.0%	11	1.9%	13	2.1%
Taylor University College and Seminary[4]	–	–	12	7.6%	n/a	n/a	n/a	n/a
Specialized Arts and Culture Institutions	80	6.1%	72	5.4%	69	5.2%	70	5.3%
Alberta College of Art and Design	80	6.1%	72	5.4%	69	5.2%	70	5.3%
TOTAL	9,804	4.4%	11,840	5.2%	12,614	5.5%	13,143	5.7%

Notes:

1. In 2009, the Lieutenant Governor in Council changed the names of Grant MacEwan College and Mount Royal College to Grant MacEwan University and Mount Royal University.
2. 2008-09 was the first year that Mount Royal reported enrolment in English language (ESL) training and academic upgrading.
3. In 2007, Alliance University College and Canadian Nazarene University College merged to become Ambrose University College.
4. As of June 30, 2009, Taylor University College and Seminary became Taylor College and Seminary, ceasing to offer undergraduate academic baccalaureate programs.

Values less than five have been suppressed and are indicated by (–). Data for the Banff Centre are unavailable, as it does not report through LERS.
Athabasca University enrolments are not included. Since AU is not campus-based institution, its international students tend to be distance learners and do not need a visa.
Values represent unique students; therefore, the sum of the rows will not equal the total listed, as some students may attend more than one institution.

Source: Alberta Enterprise and Advanced Education, Learner and Enrolment Reporting System (LERS).

B11. Top Enrolment Programs - Visa and Non-Visa, 2010-11

Visa students	FLEs	Non-visa students	FLEs
General Studies	1,175.8	General Studies	11,465.4
Business Administration and Management, General	900.5	Business Administration and Management, General	6,393.9
Economics, General	452.8	Nursing/Registered Nurse	6,166.2
Second Language Learning (not for credit)	434.7	Biology/Biological Sciences, General	4,284.7
Electrical, Electronics and Communications Engineering	372.7	Preparatory and Advanced High School/Secondary	3,646.4
Accounting	368.6	Accounting	3,520.9
Civil Engineering, General	319.4	Psychology, General	3,392.6
Computer Science	298.0	Business/Commerce, General	3,338.8
Medical Residency Programs, Other	283.6	Elementary Education and Teaching	2,727.8
Mechanical Engineering	269.3	Second Language Learning (not for credit)	2,679.3
Business/Commerce, General	240.1	Licensed Practical Nurse/Vocational Nurse Training	2,193.5
Engineering, General	229.0	Electrician	1,921.5
Biology/Biological Sciences, General	216.8	English Language and Literature, General	1,779.2
Chemistry, General	214.0	Engineering, General	1,744.7
Materials Engineering	198.1	Medical Residency Programs, Other	1,611.3
Chemical Engineering	197.4	Kinesiology and Exercise Science	1,455.7
Finance, General	152.9	Medicine (M.D.)	1,421.0
Agriculture, General	140.1	Mechanical Engineering	1,400.2
Medical Scientist	134.3	Social Work	1,273.2
Geology/Earth Science, General	119.5	Regular/General High School/Secondary Diploma Program	1,273.0
Nursing/Registered Nurse	93.1	Civil Engineering, General	1,173.9
Psychology, General	92.6	Health and Physical Education, General	1,116.6
Surveying Engineer	90.1	Sociology	1,112.5
Mathematical Statistics and Probability	85.4	History, General	1,100.1
Licensed Practical/Vocational Nurse Training	80.7	Political Science and Government, General	1,065.8

Notes: Programs are listed by six-digit CIP code. Table does not include data from the Banff Centre or Athabasca University.

Source: Alberta Enterprise and Advanced Education, Learner and Enrolment Reporting System (LERS).

B12. Enrolment by Program Band and Credential - Visa

2010-11	Certificate	Certificate - Journeyman (Apprenticeship)	Certificate - Post-Basic	Certificate - Post-Degree	Degree - Applied	Degree - Bachelor	Degree - Doctoral	Degree - Master	Diploma	Diploma - Post-Basic	Diploma - Post-Degree	No Credential / Not Applicable	University Transfer	All credentials
Business	1,395.8	10.8	35.3	0.0	1,224.3	8,580.1	64.0	688.2	6,631.4	0.0	0.0	1.8	274.3	18,906.0
	47.9	0.0	3.2	0.0	96.6	739.3	34.9	146.2	957.2	0.0	0.0	0.0	17.1	2,042.4
Education	277.8	0.0	0.0	0.0	0.0	4,861.1	326.4	651.0	196.8	0.0	9.1	0.0	851.8	7,174.0
	1.3	0.0	0.0	0.0	0.0	29.7	29.1	28.1	5.6	0.0	0.8	0.0	3.6	98.1
Health Sciences	2,500.5	0.0	217.4	1,632.8	74.3	10,603.5	554.7	1,630.6	5,393.6	0.0	26.6	221.3	1,204.1	24,059.4
	23.7	0.0	16.9	283.8	2.2	154.3	121.6	141.9	117.2	0.0	0.0	29.7	15.6	906.9
Languages, Social Sciences, Arts and Humanities	872.2	0.0	16.4	0.0	754.5	19,697.4	546.1	1,001.1	4,029.9	0.0	4.0	4,580.9	1,145.4	32,647.8
	45.6	0.0	0.1	0.0	12.2	1,265.4	190.2	152.2	398.8	0.0	0.0	348.4	13.8	2,426.8
Legal and Security	235.7	0.0	10.7	0.7	123.9	1,006.1	2.5	24.1	1,424.2	0.0	0.0	221.4	14.5	3,063.9
	0.4	0.0	0.0	0.0	0.2	16.8	2.0	12.1	21.2	0.0	0.0	0.0	0.0	52.7
Physical, Natural and Applied Sciences	415.8	95.8	4.6	0.0	449.7	16,506.0	1,504.4	2,079.3	2,473.2	0.0	0.8	103.5	549.5	24,182.4
	13.3	0.0	0.0	0.0	48.9	1,126.7	1,190.6	1,250.6	63.2	0.0	0.0	3.5	32.6	3,729.4
Preparatory and Basic Upgrading	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9,853.1	0.0	9,856.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	498.8	0.0	498.8
Recreation	84.4	0.0	18.1	0.0	270.4	1,953.0	59.4	100.6	392.6	0.0	0.0	18.5	427.9	3,325.0
	0.5	0.0	0.0	0.0	3.9	16.1	23.7	5.8	3.5	0.0	0.0	0.0	2.6	56.2
Trades and Technology	2,295.3	7,302.8	0.0	0.0	121.8	120.3	0.0	0.0	4,718.8	0.0	0.0	108.0	0.0	14,667.1
	31.9	0.3	0.0	0.0	22.2	6.8	0.0	0.0	327.4	0.0	0.0	1.7	0.0	390.3
All program bands	8,080.4	7,409.5	302.5	1,633.5	3,018.8	63,327.6	3,057.5	6,174.8	25,260.5	0.0	40.4	15,108.4	4,467.6	137,881.6
	164.6	0.3	20.2	283.8	186.2	3,355.2	1,592.0	1,737.1	1,894.0	0.0	0.8	882.1	85.3	10,201.5

Notes: Table does not include the Banff Centre or Athabasca University.

Source: Alberta Enterprise and Advanced Education, Learner and Enrolment Reporting System (LERS).

☐ Non-Visa FLEs ▨ Visa FLEs

B13. Enrolment by Program Band and Credential - Aboriginal

2010-11	Certificate	Certificate - Journeyman (Apprenticeship)	Certificate - Post-Basic	Certificate - Post-Degree	Degree - Applied	Degree - Bachelor	Degree - Doctoral	Degree - Master	Diploma	Diploma - Post-Basic	Diploma - Post-Degree	No Credential / Not Applicable	University Transfer	All credentials
Business	1,361.0	10.8	38.2	0.0	1,303.6	9,677.0	112.8	1,149.2	7,383.2	0.0	72.7	1.8	278.5	21,388.7
	149.9	0.0	0.3	0.0	17.3	193.2	0.0	11.3	205.4	0.0	2.8	0.0	12.9	593.2
Education	235.1	0.0	0.0	4.8	0.0	4,744.3	361.3	738.6	186.3	7.4	25.5	0.0	817.7	7,121.0
	43.9	0.0	0.0	0.0	0.0	146.6	23.7	40.4	16.1	0.0	0.7	0.0	37.7	309.1
Health Sciences	2,408.3	0.0	230.0	1,952.2	76.5	11,029.1	666.5	2,425.5	5,336.0	0.0	28.4	249.1	1,193.9	25,595.6
	118.4	0.0	4.3	10.7	0.0	284.1	9.8	43.0	174.8	0.0	1.4	1.8	25.9	674.2
Languages, Social Sciences, Arts and Humanities	795.7	0.0	16.4	0.0	755.9	20,685.4	723.7	1,307.7	4,175.9	0.0	4.0	8,954.5	1,031.5	38,450.7
	135.6	0.0	0.1	0.0	10.9	691.3	12.5	37.9	257.4	0.0	0.0	395.0	127.7	1,668.3
Legal and Security	201.6	0.0	10.4	0.7	115.6	1,091.3	4.5	36.3	1,382.3	0.0	3.7	221.0	14.1	3,081.4
	34.5	0.0	0.3	0.0	8.5	30.0	0.0	0.0	63.1	0.0	0.0	0.3	0.4	137.2
Physical, Natural and Applied Sciences	408.4	94.1	4.6	0.0	489.8	17,519.3	2,684.9	3,394.5	2,472.8	0.0	7.2	106.1	571.5	27,753.0
	25.1	1.7	0.0	0.0	8.8	261.3	10.1	26.8	63.6	0.0	0.6	0.9	10.7	409.6
Preparatory and Basic Upgrading	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8,928.7	0.0	8,929.3
	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,423.2	0.0	1,425.5
Recreation	79.3	0.0	16.0	0.0	267.7	1,910.0	82.1	105.2	381.0	0.0	0.0	18.5	418.8	3,278.6
	5.6	0.0	2.1	0.0	6.6	59.2	1.0	1.2	15.1	0.0	0.0	0.0	11.7	102.6
Trades and Technology	2,173.6	7,047.0	0.0	0.0	144.0	124.3	0.0	0.0	4,951.7	0.0	0.0	108.2	0.0	14,548.8
	153.7	256.1	0.0	0.0	0.0	2.8	0.0	0.0	94.5	0.0	0.0	1.5	0.0	508.6
All program bands	7,663.5	7,151.9	315.5	1,957.7	3,152.9	66,780.6	4,635.8	9,157.1	26,269.1	7.4	141.5	18,587.9	4,326.0	150,147.0
	669.1	257.9	7.2	10.7	52.2	1,668.4	57.0	160.6	890.0	0.0	5.5	1,822.8	226.9	5,828.2

Notes: Table does not include the Banff Centre or Athabasca University.

Source: Alberta Enterprise and Advanced Education, Learner and Enrolment Reporting System (LERS).

☐ Non-Aboriginal FLEs ▨ Aboriginal FLEs

B14. Students with Disabilities Seeking Supports

	2007-08		2008-09		2009-10		2010-11	
	Students seeking supports	% seeking supports	Students seeking supports	% seeking supports	Students seeking supports	% seeking supports	Students seeking supports	% seeking supports
Comprehensive Academic and Research Institutions	2,952	2.6%	3,562	3.1%	4,024	3.4%	3,755	3.1%
Athabasca University	1,215	3.2%	1,597	4.1%	1,868	4.9%	1,509	3.9%
University of Alberta	866	2.1%	920	2.3%	972	2.4%	846	2.0%
University of Calgary	610	2.0%	812	2.6%	900	2.8%	1,052	3.2%
University of Lethbridge	261	2.8%	233	2.7%	284	3.1%	348	3.7%
Baccalaureate and Applied Studies Institutions	1,047	3.6%	1,094	3.3%	1,286	3.7%	1,278	3.6%
Grant MacEwan University[1]	408	2.4%	444	2.5%	496	2.7%	583	3.0%
Mount Royal University[1,2]	639	5.0%	650	4.3%	790	4.9%	695	4.4%
Polytechnical Institutions	882	1.5%	1,168	2.0%	1,365	2.5%	1,612	3.0%
Northern Alberta Institute of Technology	414	1.5%	538	1.8%	670	2.4%	969	3.5%
Southern Alberta Institute of Technology	468	1.6%	630	2.2%	695	2.6%	643	2.5%
Comprehensive Community Institutions	1,821	3.4%	2,035	3.8%	2,529	4.5%	2,704	4.8%
Bow Valley College	397	4.9%	397	4.8%	461	5.4%	495	5.6%
Grande Prairie Regional College	21	0.9%	25	1.1%	80	2.0%	70	1.8%
Keyano College	202	8.0%	193	7.3%	223	7.8%	210	7.2%
Lakeland College	110	1.4%	140	1.8%	134	1.8%	183	2.3%
Lethbridge College	122	1.9%	162	2.5%	185	2.8%	246	3.8%
Medicine Hat College	130	2.3%	175	3.3%	283	5.4%	233	4.3%
NorQuest College	442	6.6%	527	7.1%	596	7.1%	644	8.7%
Northern Lakes College	14	0.9%	45	2.6%	51	3.0%	59	3.4%
Olds College	60	1.9%	85	3.1%	69	2.8%	93	3.8%
Portage College	122	4.4%	114	3.7%	147	4.9%	138	3.8%
Red Deer College	201	2.8%	172	2.4%	300	4.1%	333	4.7%
Independent Academic Institutions	72	1.7%	n/a	n/a	57	3.0%	240	5.6%
Alliance University College[3]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Ambrose University College[3]	n/a	n/a	n/a	n/a	n/a	n/a	116	19.9%
Canadian Nazarene University College[3]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Canadian University College	n/a	n/a	n/a	n/a	n/a	n/a	4	1%
Concordia University College of Alberta	50	2.6%	n/a	n/a	57	3.0%	67	3.8%
St. Mary's University College	22	4.0%	n/a	n/a	n/a	n/a	34	5%
Taylor University College and Seminary[4]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
The King's University College	n/a	n/a	n/a	n/a	n/a	n/a	19	3%
Specialized Arts and Culture Institutions	116	8.8%	163	12.3%	162	12.3%	189	3.8%
Alberta College of Art and Design	116	8.8%	163	12.3%	162	12.3%	160	12.2%
Banff Centre	n/a	n/a	n/a	n/a	n/a	n/a	29	1%
TOTAL	6,890	2.6%	8,022	3.1%	9,423	3.5%	9,778	3.6%

Notes:

Data on disabled students relies on self-identification when applying for services. Data may underestimate the actual number of students with disabilities and should be considered preliminary. In 2008-09, a new methodology for producing unduplicated headcounts was introduced, which focuses on the Alberta Student Number (ASN) to reduce double counting - values listed will not match those previously reported.

1. In 2009, the Lieutenant Governor in Council changed the names of Grant MacEwan College and Mount Royal College to Grant MacEwan University and Mount Royal University.
2. 2008-09 was the first year that Mount Royal reported enrolment in English-language (ESL) training and academic upgrading.
3. In 2007, Alliance University College and Canadian Nazarene University College merged to become Ambrose University College.
4. As of June 30, 2009, Taylor University College and Seminary became Taylor College and Seminary, ceasing to offer undergraduate academic baccalaureate programs.

Source: Students with Disabilities – Post-secondary Institutions Percentages – Alberta Enterprise and Advanced Education, Learner and Enrolment Reporting System (LERS).

B15. Historical Graduates of Parchment Programs

	2006-07	2007-08	2008-09	2009-10	2010-11
Comprehensive Academic and Research Institutions	17,242	17,742	17,184	17,853	18,194
Athabasca University	1,545	1,656	1,587	1,766	1,812
University of Alberta	8,338	8,445	8,152	8,332	8,338
University of Calgary	5,751	5,789	5,659	5,981	6,279
University of Lethbridge	1,745	1,951	1,787	1,787	1,767
Baccalaureate and Applied Studies Institutions	2,783	2,506	3,496	3,263	3,758
Grant MacEwan University[1]	1,787	1,601	2,416	2,167	2,306
Mount Royal University[1]	996	905	1,080	1,096	1,452
Polytechnical Institutions	6,852	7,546	7,188	7,523	7,910
Northern Alberta Institute of Technology	3,396	3,720	3,886	4,118	3,855
Southern Alberta Institute of Technology	3,456	3,826	3,303	3,405	4,055
Comprehensive Community Institutions	6,252	5,799	6,384	6,614	7,271
Bow Valley College	682	555	689	886	964
Grande Prairie Regional College	274	189	201	361	429
Keyano College	279	399	302	448	364
Lakeland College	674	734	861	769	1,006
Lethbridge College	985	907	952	902	852
Medicine Hat College	376	363	313	311	400
NorQuest College	1,185	977	1,370	1,093	1,266
Northern Lakes College	163	171	251	259	326
Olds College	611	636	561	591	513
Portage College	411	256	304	342	402
Red Deer College	613	615	581	655	753
Independent Academic Institutions	685	655	642	622	684
Alliance University College[2]	14	n/a	n/a	n/a	n/a
Ambrose University College[2]	n/a	57	53	35	53
Canadian Nazarene University College[2]	35	n/a	n/a	n/a	n/a
Canadian University College	78	61	62	59	66
Concordia University College of Alberta	344	352	339	331	349
King's University College	135	119	110	125	134
St. Mary's University College	29	37	44	72	82
Taylor University College and Seminary[3]	50	29	34	n/a	n/a
Specialized Arts and Culture Institutions	199	209	193	190	191
Alberta College of Art and Design	199	209	193	190	191
TOTAL	33,967	34,428	35,038	36,029	37,968

Notes:

Values represent unique graduates; therefore, summing the rows will not equal the total listed.

1. In 2009, the Lieutenant Governor in Council changed the names of Grant MacEwan College and Mount Royal College to Grant MacEwan University and Mount Royal University.
2. In 2007, Alliance University College and Canadian Nazarene University College merged to become Ambrose University College.
3. As of June 30, 2009, Taylor University College and Seminary became Taylor College and Seminary and ceased offering undergraduate academic baccalaureate programs, so no enrolments will be reported as of 2009-10.

Data from Banff Centre is not available, as it does not report through LERS.

Source: Alberta Enterprise and Advanced Education, Learner and Enrolment Reporting System (LERS).

B16. Historical Parchments Awarded

	2006-07	2007-08	2008-09	2009-10	2010-11
Comprehensive Academic and Research Institutions	17,903	18,389	17,642	18,324	18,620
Athabasca University	1,562	1,656	1,590	1,768	1,814
University of Alberta	8,488	8,580	8,240	8,433	8,410
University of Calgary	5,973	6,019	5,852	6,191	6,479
University of Lethbridge	1,880	2,134	1,960	1,932	1,917
Baccalaureate and Applied Studies Institutions	2,789	2,514	3,525	3,295	3,791
Grant MacEwan University[1]	1,793	1,602	2,428	2,186	2,333
Mount Royal University[1]	996	912	1,097	1,109	1,458
Polytechnical Institutions	6,867	7,561	7,202	7,542	7,941
Northern Alberta Institute of Technology	3,406	3,730	3,895	4,134	3,865
Southern Alberta Institute of Technology	3,461	3,831	3,307	3,408	4,076
Comprehensive Community Institutions	6,354	5,939	6,541	6,700	7,365
Bow Valley College	686	557	691	903	974
Grande Prairie Regional College	276	193	220	395	471
Keyano College	285	426	304	461	373
Lakeland College	685	743	866	774	1,011
Lethbridge College	999	910	954	905	853
Medicine Hat College	376	370	314	315	404
NorQuest College	1,185	977	1,370	1,094	1,267
Northern Lakes College	163	174	251	259	328
Olds College	611	637	561	591	513
Portage College	468	326	422	344	411
Red Deer College	620	626	588	659	760
Independent Academic Institutions	688	655	643	622	685
Alliance University College[2]	14	n/a	n/a	n/a	n/a
Ambrose University College[2]	n/a	57	53	35	53
Canadian Nazarene University College[2]	35	n/a	n/a	n/a	n/a
Canadian University College	79	61	62	59	66
Concordia University College of Alberta	346	352	340	331	350
King's University College	135	119	110	125	134
St. Mary's University College	29	37	44	72	82
Taylor University College and Seminary[3]	50	29	34	n/a	n/a
Specialized Arts and Culture Institutions	199	209	193	190	191
Alberta College of Art and Design	199	209	193	190	191
TOTAL	34,800	35,267	35,746	36,673	38,593

Notes:

Values represent unique graduates; therefore, the sum of the rows will not equal the total listed.

1. In 2009, the Lieutenant Governor in Council changed the names of Grant MacEwan College and Mount Royal College to Grant MacEwan University and Mount Royal University.
2. In 2007, Alliance University College and Canadian Nazarene University College merged to become Ambrose University College.
3. As of June 30, 2009, Taylor University College and Seminary became Taylor College and Seminary and ceased offering undergraduate academic baccalaureate programs, so no enrolments will be reported as of 2009–10.

Data from Banff Centre is not available, as it does not report through LERS.

Source: Alberta Enterprise and Advanced Education, Learner and Enrolment Reporting System (LERS).

B17. Historical Parchments Awarded - Aboriginal

	2006-07	2007-08	2008-09	2009-10	2010-11
Comprehensive Academic and Research Institutions	327	387	399	368	416
University of Alberta	166	221	219	168	228
University of Calgary	64	71	78	116	81
University of Lethbridge	72	77	80	62	67
Athabasca University	25	18	22	22	40
Baccalaureate and Applied Studies Institutions	73	71	104	100	122
Grant MacEwan University[1]	47	50	65	68	72
Mount Royal University[1]	26	21	39	32	50
Polytechnical Institutions	75	59	75	57	108
Northern Alberta Institute of Technology	42	32	46	42	68
Southern Alberta Institute of Technology	33	27	29	15	40
Comprehensive Community Institutions	404	415	645	473	536
Bow Valley College	13	3	12	0	19
Grande Prairie Regional College	21	18	23	48	51
Keyano College	41	94	45	86	58
Lakeland College	14	13	75	27	65
Lethbridge College	48	35	49	49	41
Medicine Hat College	15	21	2	2	2
NorQuest College	64	49	119	60	88
Northern Lakes College	39	47	73	67	99
Olds College	9	13	23	16	12
Portage College	132	108	211	108	87
Red Deer College	8	14	13	10	14
Independent Academic Institutions	5	8	8	7	14
Alliance University College[2]	0	n/a	n/a	n/a	n/a
Ambrose University College[2]	n/a	0	0	0	0
Canadian Nazarene University College[2]	0	n/a	n/a	n/a	n/a
Canadian University College	0	0	0	0	2
Concordia University College of Alberta	5	8	7	4	8
St. Mary's University College	0	0	0	0	0
Taylor University College and Seminary[3]	0	0	0	n/a	n/a
King's University College	0	0	1	3	4
Specialized Arts and Culture Institutions	1	0	1	4	10
Alberta College of Art and Design	1	0	1	4	10
Total	885	940	1,232	1,009	1,206

Notes:
Aboriginal students self-identify via a check box on post-secondary application forms. Data may underestimate the actual number of parchments awarded to Aboriginal graduates.
Values represent unique graduates; therefore, the sum of the rows will not equal the totals listed.
Data from Banff Centre are not available, as they do not report via LERS.
1. In 2009, the Lieutenant Governor in Council changed the names of Grant MacEwan College and Mount Royal College to Grant MacEwan University and Mount Royal University.
2. In 2007, Alliance University College and Canadian Nazarene University College merged to become Ambrose University College.
3. As of June 30, 2009, Taylor University College and Seminary became Taylor College and Seminary, ceasing to offer undergraduate academic baccalaureate programs.

Source: Alberta Enterprise and Advanced Education, Learner and Enrolment Reporting System (LERS).

B18. Historical Student Financial Assistance Recipients

	2006-07	2007-08	2008-09	2009-10	2010-11
Comprehensive Academic and Research Institutions	14,920	14,626	14,999	17,453	19,738
University of Alberta	7,831	7,575	7,547	8,343	9,116
University of Calgary	4,570	4,511	4,880	6,059	7,243
University of Lethbridge	2,019	2,082	2,069	2,421	2,713
Athabasca University	500	458	503	630	666
Baccalaureate and Applied Studies Institutions	5,694	5,667	5,753	7,325	8,565
Grant MacEwan University[1]	3,249	3,071	2,930	3,612	4,382
Mount Royal University[1]	2,445	2,596	2,823	3,713	4,183
Polytechnical Institutions	4,229	3,932	4,151	4,951	5,676
Northern Alberta Institute of Technology	2,105	1,896	1,950	2,211	2,586
Southern Alberta Institute of Technology	2,124	2,036	2,201	2,740	3,090
Comprehensive Community Institutions	3,501	3,339	3,608	4,756	5,898
Bow Valley College	236	206	223	393	710
Grande Prairie Regional College	183	161	189	328	370
Keyano College	88	92	79	100	126
Lakeland College	224	171	173	235	305
Lethbridge College	947	931	926	1,075	1,262
Medicine Hat College	424	463	521	604	660
NorQuest College	217	196	261	379	592
Northern Lakes College	38	36	32	43	75
Olds College	230	213	224	282	303
Portage College	49	40	63	69	72
Red Deer College	865	830	917	1,248	1,423
Independent Academic Institutions	928	971	955	1,096	1,220
Ambrose University College[2]	47	80	78	97	130
Canadian University College	83	86	78	121	131
Concordia University College of Alberta	512	532	494	543	574
King's University College	143	154	176	210	233
St. Mary's University College	88	80	86	121	148
Taylor University College and Seminary[3]	55	39	43	4	4
Specialized Arts and Culture Institutions	305	281	292	347	378
Alberta College of Art and Design	305	281	291	347	378
Banff Centre	n/a	n/a	1	n/a	n/a
Total	29,577	28,816	29,758	35,928	41,475

Notes:

Total values listed in this table refer only to student financial assistance recipients at publically funded post-secondary institutions, and, as such, will not match figures of overall student financial assistance recipients reported elsewhere. If students attend more than one institution, they may be counted twice.

1. In 2009, the Lieutenant Governor in Council changed the name of Grant MacEwan College and Mount Royal College to Grant MacEwan University and Mount Royal University.
2. In 2007, Alliance University College and Canadian Nazarene University College merged to become Ambrose University College.
3. As of June 30, 2009, Taylor University College and Seminary became Taylor College and Seminary and ceased offering undergraduate academic baccalaureate programs.

Source: Alberta Enterprise and Advanced Education, Learner Assistance.

Glossary

Aboriginal Identity	Those individuals who reported identifying with at least one Aboriginal group (North American Indian, Métis, or Inuit), and/or those who reported being a Treaty Indian or a Registered Indian as defined by the Indian Act of Canada, and/or those who reported that they were members of an Indian band or First Nation.
Applicant	An individual who applies to a program at a publicly funded post-secondary institution in Alberta.
Application	A request for acceptance into a program at a publicly funded post-secondary institution in Alberta.
Apprenticeship	A structured system of supervised training leading to certification in a designated trade, occupation, or craft. Programs involve a combination of on-the-job training and technical instruction, whereby an apprentice gains experiential learning and develops skills.
Block Transfer	A group of courses, such as a completed certificate or diploma program, that is accepted for transfer credit into a degree program.
CIP 2000	Classification of Instructional Programs (CIP) 2000 is a system of grouping instructional programs of study into higher-level categories for ease of use in data processing and information gathering.
Credential	A qualification resulting in the completion of a parchment program.
Full-Load Equivalent (FLE)	A measure of enrolment in which one FLE represents one student for a year of study (typically September through April) taking a full course load.
Full-time Student	An active student who is registered in the program for at least 60% of the full load of the program for the academic year in at least one session.
Geographic Service Region	Based primarily on county division boundaries, one of 10 areas of the province generally served by a Comprehensive Community Institution.
International Student	A student, in possession of a study visa, legally entitled to attend a publicly funded post-secondary institution in Alberta.
Parchment	The credential awarded to students who complete a program.
Part-time Student	An active student who is registered in the program for less than 60% of the full load of the program for the academic year for all enrolled sessions.
Program Band	One of nine high-level program groupings based on CIP 2000 categories designed to enhance the ease of data analysis and the communication and presentation of data.
Program Completer (Graduate)	Measured by the number of parchments awarded, a student who has been determined by his or her institution to have completed all program (graduation) requirements of a ministerial approved program and to whom the institution confers a parchment where a parchment is offered.
Sector	One of six categories of publicly funded post-secondary institutions in Alberta as defined in legislation: (1) Comprehensive Academic and Research Institutions, (2) Baccalaureate and Applied Studies Institutions, (3) Comprehensive Community Institutions, (4) Polytechnical Institutions, (5) Independent Academic Institutions, and (6) Specialized Arts and Culture Institutions.

Turn-Away	An applicant who met the minimum qualifications in at least one of his or her applications but was not offered admission to any program to which he or she applied and is not attending a publicly funded program at a publicly funded post-secondary institution anywhere in Alberta.
Unduplicated Graduate Headcount	An individual determined by his or her institution to have completed all program (graduation) requirements of a ministerial approved program and to whom the institution confers a parchment where a parchment is offered. Students receiving multiple parchments would be counted once, as this measure focuses on the number of unique students.
Unduplicated Student Headcount	A measure of enrolment referring to the number of unique students registered at and attending a publicly funded post-secondary institution in Alberta (full- and part-time, at any level).

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